



1999

State
of the
Commute
Report



**SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS**
Southern California Rideshare

1999

State of the Commute Report

**Southern California Association of Governments
Southern California Rideshare**

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July, 2000

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Leadership, vision and **progress** which promote economic growth, personal well-being, and livable communities for all Southern Californians.

The Association will accomplish this Mission by:

- ▲ Developing long-range regional plans and strategies that provide for efficient movement of people, goods and information; enhance economic growth and international trade; and improve the environment and quality of life.
- ▲ Providing quality information services and analysis for the region.
- ▲ Using an inclusive decision-making process that resolves conflicts and encourages trust.
- ▲ Creating an educational and work environment that cultivates creativity, initiative, and opportunity.

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Southern California Rideshare Mission Statement

The mission of Southern California Rideshare is to connect people with alternative transportation choices to driving alone through a partnership of government, business and individuals.

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1999 STATE OF THE COMMUTE

EXECUTIVE SUMMARY

Traffic congestion is one of Southern California's greatest challenges. Each day, Southern Californians waste nearly 1.8 million vehicle hours in congested traffic. Traffic congestion also contributes to air pollution, causes wasteful consumption of energy, and results in tremendous loss in productivity. As local and state transportation agencies seek to identify solutions to Southern California's transportation problems, it is important to understand how commuters get to and from work, how they perceive their commute, and what factors influence their commute decisions.

Toward this goal, nine annual State of the Commute Surveys have been conducted to study commute attitudes and behaviors in the Southern California region over the last eleven years (This study was not conducted in 1995 and 1997 due to lack of funding).

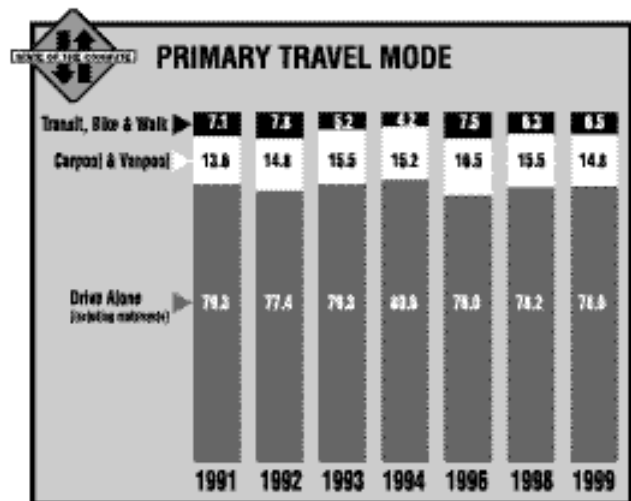
The 1999 State of the Commute Survey is based on a telephone survey of commuters in Southern California. The survey collects updated information on commuters' travel behavior and attitudes about traffic congestion, alternative travel options, employer-provided transportation information and services and high occupancy vehicle (HOV) lanes.

Historically, the study has been a useful tool for transportation planners, operators, and public officials in their efforts to shape the region's transportation policy, infrastructure and legislation. The study also is used by businesses in the development of rideshare promotional activities. The following is a summary of the 1999 State of the Commute findings.

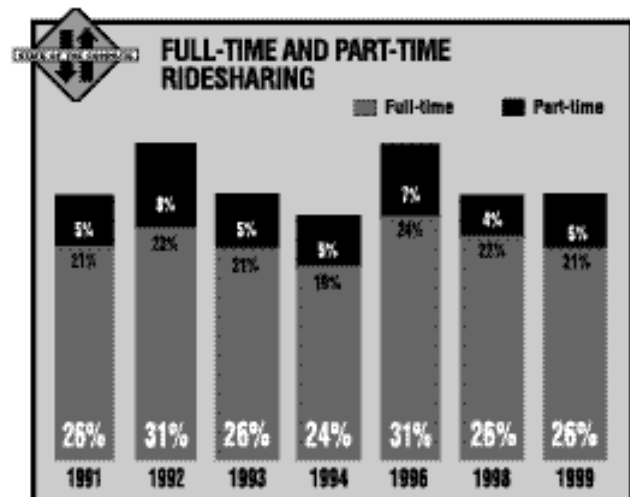
TRAVEL BEHAVIOR AND TRENDS

- ◆ **PRIMARY TRAVEL MODE:** According to the 1999 survey, 78.5 percent of commuters drive alone, 0.1 percent ride motorcycle, 13.9 percent carpool, 0.9 percent vanpool, 4.7 percent ride the bus, 0.7 percent take rail, 0.5 percent bicycle, and 1.1 percent walk to work on a regular basis.

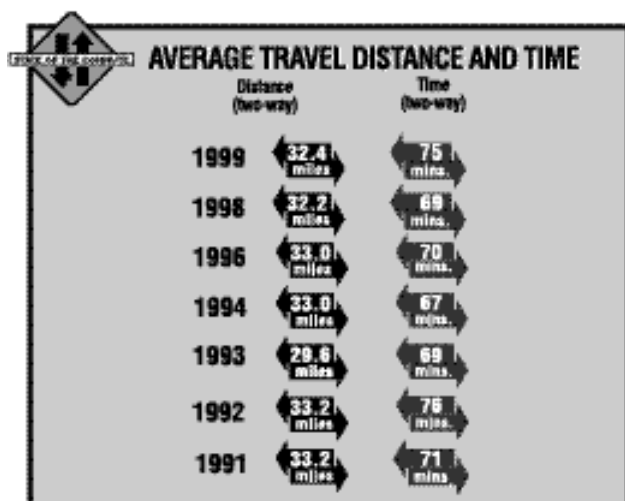
Compared to 1998 findings, the share of drive-alone and bus commuters increases slightly while the share of motorcycle, walk, carpool, and vanpool declines slightly. Usage of other travel modes is consistent with 1998 findings. In addition, the difference in the drive alone rate in 1999 compared to previous years is not statistically significant with the exception of 1996.



- ◆ **FULL-TIME AND PART-TIME RIDESHARING:** Twenty-six percent of commuters use alternatives to driving alone either full-time (three or more days a week) (21%) or part-time (one or two days a week) (5%). The percentage is the same as reported in 1998.



- ◆ **TRAVEL DISTANCE:** According to the 1999 survey, the average self-reported travel distance to work is 16.2 miles (one-way), virtually the same as reported in 1998 (16.1 miles).
- ◆ **TRAVEL TIME:** The average travel time to work is 34 minutes; the average travel time home 41 minutes. Both are higher than reported in 1998 (32 minutes and 37 minutes respectively).

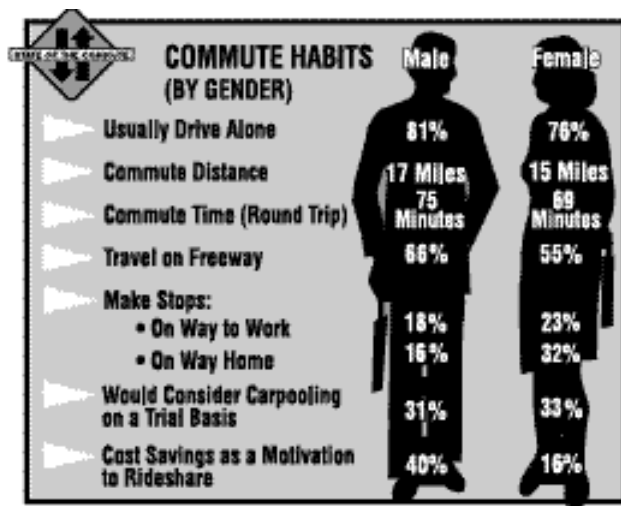


- ◆ **ARRIVAL AND DEPARTURE TIME:** Of commuters surveyed, 38 percent say they arrive at work before 7:30 a.m. and 51 percent leave work before 5:00 p.m. Consistent with findings from previous surveys, a significant percentage of commuters are now arriving at the work site before 6 a.m. (10%).
- ◆ **CARPOOLS/VANPOOLS:** Carpools consist of an average of 2.6 members. Consistent with the finding reported in 1998, carpooling with co-workers remains the second most common type of carpool formation (36%) after a steady decline from 47 percent in 1994. Carpoolers report having been in their current carpool about two and a half years (31 months) and travel an average distance of 17.2 miles to work.
- ◆ **BUS RIDERS:** Riders report they have been using bus service an average of about five and a half years (65 months). Respondents who do not currently ride the bus were asked whether there was a bus that they could take to get to work. Commuters who answered affirmatively constitute 38 percent of respondents. Bus riders commute an average distance of 11.6 miles.
- ◆ **STOPS DURING THE COMMUTE:** Twenty percent of all respondents mention that they make a stop on the way to work. Of these, 33 percent stop to take their child to day care or school and another 26 percent stop to eat. With regard to the trip home, 23 percent of commuters make stops. Of these, 28 percent stop to buy groceries or go shopping and another 28 percent stop to pick up their child from day care or school. More commuters make stops on the trip home than they do on their trip to work.
- ◆ **NEED FOR VEHICLE DURING THE WORK DAY:** Sixty-two percent of all respondents report they need their vehicle at work at least one day a week for either business or personal purposes. However, the average number of days a week these commuters need their vehicle at work is only 2.7. Thirty-eight percent of all respondents claim they don't need their vehicle at work at all for either business or personal reasons.

DEMOGRAPHIC CHARACTERISTICS

- ◆ **GENDER:** Men are somewhat more likely than women to drive alone to work on a regular basis (81% vs. 76%) and are less likely to carpool to work on a regular basis (12% vs. 17%).
- ◆ **AGE:** In general, younger commuters are more likely to use alternatives to driving alone than older commuters (28% of those under 30 years of age compared to only 15% of those 50 years of age and older).
- ◆ **ETHNICITY:** Eighty-five percent of Whites and Asians drive alone to work on a regular basis compared to 69 percent of African-Americans and 70 percent of Hispanics.

The average vanpool consists of 5.0 members. Vanpoolers report having been in their current vanpool an average of nearly four years (47 months) and travel an average distance of 17.1 miles to work.



- ◆ **INCOME:** The highest income group of commuters with an annual household income of \$80,000 or more are the most likely to drive alone (84%) and the least likely to carpool (12%) to work; while the lowest income group of commuters with less than \$35,000 are the least likely to drive alone (66%) and the most likely to carpool (17%) or take a public bus (10%) to work.

- ◆ **NUMBER OF MOTORIZED VEHICLES:** The question was not asked in the 1999 survey. According to the 1998 survey, respondents report an average of 2.5 motorized vehicles per household. Motorized vehicles include automobiles, trucks, vans and highway motorcycles owned or leased by members of the household.

- ◆ **AVAILABILITY OF A VEHICLE TO WORK:** Five percent of the respondents report never having a vehicle available for commuting purposes.

COMMUTER AWARENESS OF EMPLOYER- PROVIDED TRANSPORTATION INFORMATION AND SERVICES

Awareness of employer-provided transportation information and services to encourage use of alternative travel modes or work schedules is of particular interest to those who advocate the effectiveness of these programs in reducing peak period travel.

- ◆ **TELECOMMUTING:** Of those surveyed, 8.6 percent of the respondents say they have the opportunity to work at home instead of their regular place of work. Of those with the

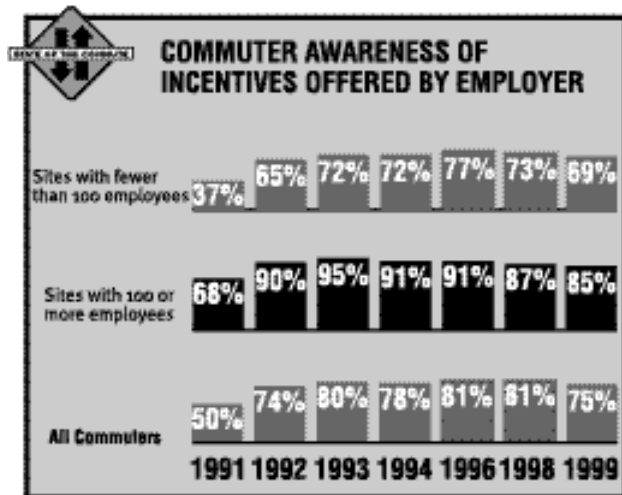
opportunity to work at home, 82 percent actually do. Telecommuters report working at home an average of 3.2 days per month. Commuters with an annual household income of \$65,000 or more are more likely to have the opportunity to telecommute than their counterparts with a lower household income (14% vs. 6%).

- ◆ **ALTERNATIVE WORK SCHEDULES:** Of those surveyed, 47 percent of area commuters report that their employer offers flexible work hours; of these, 75 percent participate. In addition:

- Eighteen percent say their employer offers a 4/40 work week (working four, 10-hour days and getting a day off every week); of these, 12 percent participate.
- Nine percent report that their employer offers a 9/80 work week (working nine-hour days and getting a day off every other week); of these, 29 percent participate.
- Five percent of area commuters say their employer offers a 3/36 work week (working 12-hour days and getting two days off a week); of these, 12 percent participate.
- Five percent of all respondents say they are currently on either a 4/40, 9/80, or 3/36 work schedule.

- ◆ **AWARENESS OF EMPLOYER-PROVIDED TRANSPORTATION INFORMATION AND SERVICES:** Commuters are most likely to be aware of the following employer-provided transportation programs: flexible work hours (47%), a guaranteed ride home in the event of an emergency (34%), ridesharing information (31%), assistance in forming carpools/vanpools (27%), preferential parking (23%), 4/40 work schedule (18%), bus information on routes and schedules (14%), registration of employees with a rideshare agency (12%), free/low cost parking for ridesharing (11%), and contests/prizes for ridesharers (10%). However, the level of awareness continued to decline for the vast majority of employer transportation programs from 1998 to 1999 after a significant drop

from 1996 to 1998. Employees at sites with 100 or more employees were much more likely to say that their employer offered at least one transportation program (85%) than those at sites with fewer than 100 employees (69%). Employees at currently regulated sites with 250 or more employees were most likely to say that their employers offered at least one transportation program (89%).



Commuters aware of employer-provided transportation information and services were asked whether they have used any of them. Participation rates are highest for the following transportation programs: telecommuting (82%), flexible work hours (75%), transportation allowances (46%), ridesharing subsidies (46%), use of a company car to run personal errands (44%), and registration with a rideshare agency (40%). Other programs with higher participation rates include: free or low-cost parking for ridesharers (39%), contests/prizes for ridesharers (39%), 9/80 work schedule (29%), ridesharing information (27%), preferential parking spaces to ridesharers (25%), and carpool/vanpool formation assistance (24%).

In general, of employees who have utilized transportation services offered by their employers, more than one in seven believes that it influenced their choice of travel mode. The most influential programs are: transportation allowance (32%), ridesharing subsidies (30%), free/low cost parking for ridesharers (21%), bus and rail information on routes and

schedules (18%), contests/prizes for ridesharers (18%), guaranteed ride home (15%), carpool and vanpool formation assistance (15%), and ridesharing information (15%).

◆ **RECOGNITION OF THE 1-800-COMMUTE TELEPHONE NUMBER:**

Of those surveyed, 33 percent are aware of the 1-800-COMMUTE telephone number and three percent have actually called the number for commute-related information. Recognition of 1-800-COMMUTE is significantly less than the recognition of a RIDE number (61%) reported in 1994. The 1-800-COMMUTE number was implemented in 1994.

Of those who have contacted the 1-800-COMMUTE number, 39 percent were interested in receiving information on carpools/vanpools, followed by Metrolink (22%), bus/rail options (18%), freeway conditions (9%), and telecommuting (2%).

- ◆ **RECEIPT OF THE RIDEGUIDE:** Six percent of regional commuters report receiving a RideGuide during the past 12 months, same as reported in 1998 but significantly lower than the 10 percent reported in 1996. Predominantly, most of these commuters were interested in information on carpooling (76%), followed by bus (22%), vanpooling (13%), rail (11%), HOV lanes (4%), and park and ride lots (4%).

USE OF AND ATTITUDES TOWARD HOV LANES

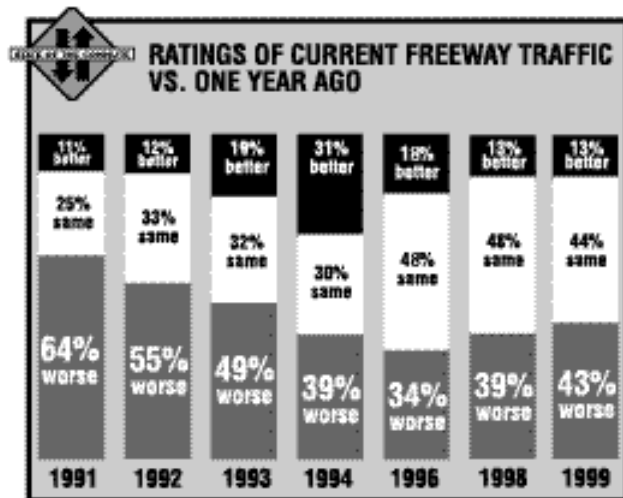
- ◆ **AVAILABILITY AND USE OF HOV LANES:** Nearly two-thirds of commuters use a freeway to travel to or from work (61%). Of these, 55 percent report having HOV lanes available to them. This continues a steady up trend since 1993 (37%). Of those having HOV lanes available to them, nearly one in five (18%) actually used the lanes at least once in the week prior to the survey. The vast majority of ridesharers with access to an HOV lane (71%) report traveling on the HOV lane to work.

- ◆ **ATTITUDES TOWARD HOV LANES:** Of the respondents with no HOV lanes available to them, 39 percent believe the availability of these HOV lanes would personally encourage them to carpool, vanpool, or take the bus.

ATTITUDES TOWARD TRAFFIC AND THE COMMUTE

- ◆ **PERCEPTIONS OF TRAFFIC:** Survey respondents were asked to evaluate traffic during their commute, looking both at surface streets and freeways. Commuters consider freeway traffic worse than street traffic. Of those surveyed, 12 percent consider freeway traffic during their commutes to be always good, and 16 percent consider street traffic to be always good. This continues a steady decline since 1994 (26% and 37% respectively). Noticeably the gap between freeways and surface streets is narrowing.

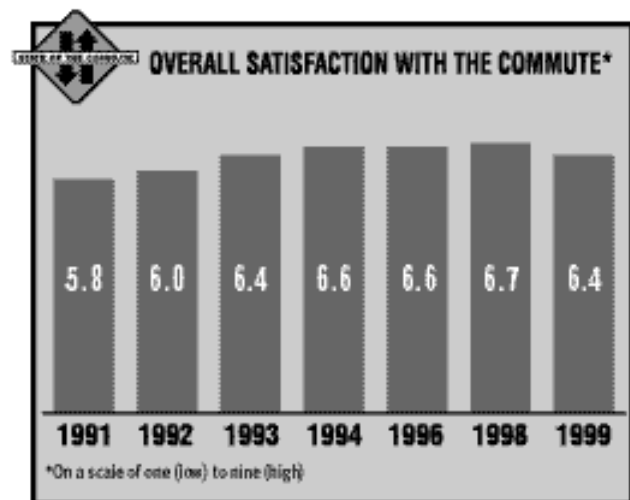
Compared to 1998 findings, more commuters consider the current freeway (43% in 1999 vs. 39% in 1998) and surface traffic (33% vs. 30%) worse than one year ago. Accordingly, the share of commuters reporting that their commute is longer now than a year ago increased from 29 percent in 1998 to 33 percent in 1999.



- ◆ **CONSIDERATION OF ALTERNATIVE MODES:** When drive-alone commuters were asked what alternative travel modes they would consider using on a trial basis, 32 percent said they would consider carpooling, 28 percent would consider vanpooling, 18 percent would consider bicycling, 16 percent

would consider walking or jogging, 16 percent would consider rail, and 13 percent would consider taking the bus.

- ◆ **SATISFACTION WITH THE COMMUTE:** On a scale of one (low) to nine (high), respondents give their commute an average rating of 6.4. This represents the first reversal of a steady up trend of satisfaction rating since 1990 (from 5.8 in 1990 to 6.7 in 1998). Over one-third of all commuters (36%) rate their satisfaction level as either an eight or nine, lower than the 42 percent reported in 1998. Six percent rate their level of satisfaction as either a one or two, higher than the four percent reported in 1998.



- ◆ **STRESSFULNESS OF THE COMMUTE:** More than one-quarter (29%) of all commuters report that they are fairly often or very often bothered by traffic congestion. The longer the trip, in terms of time and distance, the more bothered by traffic congestion and the more stressed commuters become.
- ◆ **COMMUTE-RELATED TRANSITIONS:** Nearly one in three respondents (31%) changed residence within the last two years. Of these, 17 percent cited commute-related reasons. Similarly, four in ten respondents (43%) changed jobs within the last two years; of these, 22 percent cited commute-related reasons.
- ◆ **COMMUTE COSTS:** Less than one-third (29%) of all respondents claimed to have previously calculated their commuting costs.

However, every respondent was asked to estimate their monthly commuting costs. For all commuters including those who had and had not previously estimated commuting costs, the perceived monthly cost of commuting on average is \$92, lower than the \$99 reported in 1998.

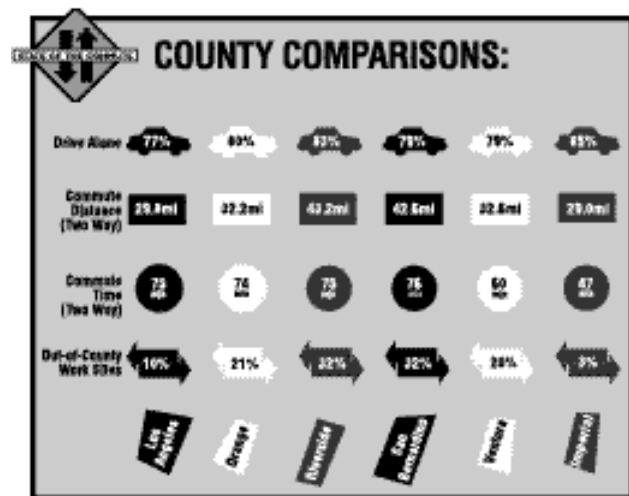


COUNTY COMPARISONS

- ◆ Comparing the commute across county lines, the study shows Los Angeles County has the lowest drive alone rate, while Imperial County has the highest. Riverside and San Bernardino County residents are the most likely to cross county lines to get to work. Residents in San Bernardino and Riverside Counties spend the most time commuting and travel the farthest. Orange County continues to have the highest rate of HOV lane availability but the second lowest carpooling rate. San Bernardino County commuters perceive their freeway traffic to be worse than do commuters in other counties while Orange and Riverside County commuters perceive their surface street traffic to be worse than do commuters in other counties. Commuters in Imperial and Ventura counties are more satisfied with the commuter than their counterparts in other counties.

AT-HOME WORKERS

- ◆ Nearly one in ten full-time workers in the region (9.5%) work primarily at home. Over 80 percent of these at-home workers are self-employed, compared to only 12 percent of commuters.



1999 STATE OF THE COMMUTE CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Results of the 1999 State of the Commute study support the following major conclusions:

- ◆ Perceived traffic congestion on both freeways and surface streets deteriorated from 1998 to 1999. Commuters spent more time in commuting both to and from work in 1999 than in 1998. Significantly, for the first time since 1990, commuters were less satisfied with their commute.



- ◆ Many travel characteristics of regional commuters - including primary transportation modes, commute distance, work place arrival and departure times, parking, freeway and alternate route usage, the availability of a vehicle for getting to and from work, the need for

a car during the work day, and park and ride lot usage - are consistent with findings from previous surveys.

- ◆ Drive-alone commuters continue to show greater interest in carpooling than in any other alternative travel mode.
- ◆ Awareness of most employer transportation programs continued to decline from 1998 to 1999 after a significant drop from 1996 to 1998. The decline in program awareness is likely to be a result of weakened regional marketing efforts due to previous substantial cuts in funding to the regional rideshare programs and elimination or scaling-down of employee trip reduction programs by employers, particularly at those sites with 100-249 employees, in response to air quality deregulation.
- ◆ However, employer-provided transportation information and services may influence an employee's commute mode choice. In general, of employees who have utilized transportation services offered by their employer, one in seven believes that these services influenced their choice of travel mode.
- ◆ There is no single transportation alternative which will address the needs and interests of all commuters. Findings from the State of the Commute continue to reveal that commuters differ in terms of their commute characteristics - trip distance, trip time, work site arrival and departure times - as well as their attitudes about traffic congestion, commute stress and satisfaction with the commute. In addition, factors which influence an individual's decision on how they travel to work vary considerably between individual commuters.

RECOMMENDATIONS

While the existing environment makes driving alone so attractive, data from the State of the Commute study continue to show that there is a group of commuters who can be adequately served by commute alternatives. To encourage and support the use of commute alternatives by these commuters, it is recommended that transportation planners, operators, policy makers and employers in this region implement the following actions: increase regional market-

ing efforts to sustain the existing carpool market share, develop and implement a regionwide rideshare marketing campaign, support efforts to expand and retain the regional HOV network, encourage voluntary-provided transportation information and services that promote ridesharing at work sites, and support efforts for research and development in the area of advanced travel information systems (ATIS) .

◆ *Increase Regional Marketing Efforts to Sustain the Existing Carpool Market Share*

The role of carpooling in Southern California is significant. Given the dispersed pattern of jobs and housing within the region, the length of the commute that many commuters daily endure, and their somewhat limited travel options, carpooling remains the most accessible alternative commute option available to regional commuters.



However, there are many factors that are making it more difficult to keep the existing carpool market share. Funding to the rideshare programs in this region has been cut significantly over the past several years. Air quality deregulation especially SB 432 has weakened regulatory support to rideshare programs at work sites. As a result, fewer commuters in the SCAG region are receiving RideGuides, carpooling with co-workers is declining, and employee's awareness of many employer transportation programs is down significantly.

It is very important to maintain the existing carpool market share since a one percent drop in the carpooling rate translates into more than 40,000 additional vehicles on our already crowded freeways and surface streets daily which in turn results in an annual increase of 302 million vehicle miles of travel.

In order to sustain the existing carpool market share, more resources are needed to strengthen rideshare programs in this region to promote voluntary ridesharing at work sites, market the extensive regional HOV network to regional commuters, and conduct marketing campaigns to increase commuter's awareness of available commute options.

◆ ***Develop and Implement a Region-wide Rideshare Marketing Campaign***

Recognition of rideshare advertising or the 1-800-COMMUTE information number by regional commuters continues to decline. In addition, receipt of the RideGuide and carpooling with co-workers has steadily declined since 1994. This is significant since co-worker carpools are more likely than family/friend carpools to travel longer distances, travel on freeways and use HOV lanes. Unfortunately, there is currently no regional rideshare marketing campaign in place to reverse these trends.

Questions regarding the efficiency of HOV facilities ultimately come down to how effective HOV lanes are in reducing single-occupancy commuting. Currently, there are no programs to educate the public on how to utilize the HOV facilities or to inform them of the benefits.

As with any "product," ridesharing needs consistent, on-going exposure to its audience: the six million commuters in the greater Los Angeles area. The fact is, ridesharing is not a "one-time purchase." The average rideshare arrangement lasts two and half years. A significant number of commuters change their work location and/or residence in a two year period.

On-going advertising is vital to ensure that Southern California maintains its current ridesharing rate. It is also a highly effective way to increase the percentage of ridesharers.

◆ ***Support Efforts to Expand and Retain the Regional HOV Network***

Findings from the State of the Commute study illustrate the important role HOV lanes play in encouraging drive-alone commuters to rideshare. About nine in ten HOV users reported that the HOV lane saved them time. Time savings ranks second only to convenience as a motivating factor in an individual's choice of travel mode. Nearly 40 percent of the survey respondents with no access to HOV lanes believe



that the availability of HOV lanes would personally encourage them to rideshare. As a result, HOV lanes may be one of the region's most powerful incentives to rideshare.

The HOV network is an integral part of the solutions prescribed by the 1998 Regional Transportation Plan (RTP) to address traffic congestion and air pollution in this region. The RTP proposed more than \$1 billion over the next two decades to expand the existing HOV network. Studies have shown that HOV lanes can have a significant impact on carpooling behavior among peak period commuters, and particularly on those able to take full advantage of the lane's travel time savings. Therefore, as the HOV network expands, support should be given to these new facilities as they open and to aggressively market and promote HOV lanes to the commuting population.

◆ ***Encourage Voluntary Employer-Provided Transportation Information and Services that Promote Ridesharing at Work Sites***

Work sites continue to be a very important rideshare market because it is easier for employees at the same or nearby work site to form carpools or vanpools due to their similar origins and destinations, work hours, and regular commuting trips. Carpooling with co-workers is the second most common type of carpool formation (36%). Given the air quality deregulation, it is even more imperative to encourage voluntary employer-provided rideshare information and services at work sites so that existing ridesharers can get the rideshare assistance they need and potential ridesharers will have enough incentives to change their solo-driving habits. The marketing of ridesharing options at the work site should be considered as

an essential part of any strategy aimed at sustaining current carpool market share and converting drive-alone commuters into ridesharers.

◆ ***Support Efforts for Research and Development in the Areas of Advanced Traveler Information Systems (ATIS)***

Millions of dollars have been spent to advise motorists of current traffic conditions after they have made the decision to drive alone and are already in their vehicles. By comparison, little has been spent to develop ATIS to reach travelers with information about alternatives before they have made a mode choice.

By utilizing state-of-the-art technologies (Internet, Intranet, electronic mail systems), updated traveler information could be transmitted directly to the individuals who most need the information each and every day: the commuter.

ABOUT THE STUDY

The core methodology for all nine State of the Commute Surveys has been the same. An outside marketing research firm drew a sample of commuters based on randomly selected telephone numbers for the region. The sample is designed to be representative of all commuters residing in the SCAG region who are 18 years or older and work outside the home at least 35 hours per week. Data are gathered through a 16-20 minute telephone survey between September and December. The timing for data collection has remained virtually the same for all nine surveys.

Data for the 1999 State of the Commute study was obtained through 2,925 completed telephone surveys. Starting in 1996, a larger sample size was obtained (historically about 2,500) due to the inclusion of Imperial County. A 1.8 percent sampling error is normally associated with sample sizes of 2,900. A 1.8 percent sampling error means that if this survey were conducted 100 times, one would be confident that 95 times out of 100 the characteristics of the sample would reflect the characteristics of the population within plus or minus 1.8 percent.

Interviewers were instructed to complete 525 interviews within Los Angeles, Orange, Riverside, San Bernardino and Ventura counties and 300 interviews within Imperial County. Once all surveys had been

completed, responses were weighted by the number of eligible respondents within the household. For analysis at the regional level, data was additionally weighted by the number of workers within each county based on the 1990 Census.

Data obtained from the 1999 State of the Commute Survey is compared with that of the previous surveys to uncover changes in behavior and attitudes. Information obtained from the 1999 State of the Commute study includes travel modes, work trip time and distance, arrival and departure times, stops made enroute, work schedules, full-time and part-time transportation alternatives, vehicle availability, parking costs, awareness of and participation in employer transportation programs, employer size, park and ride lot usage, and carpool characteristics. Demographic data gathered includes age, gender, race, ethnicity, occupation, years at the work site and residence, home and work counties, and household income.

The 1999 study also gathered information about various transportation issues, including:

- ◆ freeway usage
- ◆ use of and attitudes toward HOV lanes
- ◆ use of alternate routes
- ◆ availability of transit
- ◆ perceptions of traffic conditions and changes in those conditions over time
- ◆ availability of and participation in alternative work schedules and telecommuting
- ◆ commute satisfaction
- ◆ commute costs
- ◆ commute stress
- ◆ previous ridesharing experience
- ◆ commuter concerns
- ◆ willingness to try alternative travel options in the face of changing traffic conditions and reasons for unwillingness

- ◆ recognition of regional commuter assistance telephone number and personalized commute planner (RideGuide)

In addition, the 1999 study includes a brief new survey collecting demographic data of at-home workers in the region.

To request copies of the 1999 State of the Commute full report, write State of the Commute, Southern California Rideshare, 818 W. 7th Street, 12th floor, Los Angeles, CA 90017 or call (213) 236-1984. The report is also available for viewing and downloading on the Internet at:
<http://www.scag.ca.gov/major/soc99.htm>

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1 Introduction

1.1 DESCRIPTION OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS AND SOUTHERN CALIFORNIA RIDESHARE

The Southern California Association of Governments (SCAG) is a Council of Governments serving more than 15 million people in a region covering more than 38,000 square miles. There are six counties - Los Angeles, Orange, Riverside, San Bernardino, Ventura and Imperial - containing 188 cities within the SCAG region. SCAG is the officially designated regional Metropolitan Planning Organization (MPO) responsible for preparing regional policies and action plans that address issues that cross city and county boundaries such as transportation, air quality, housing, growth, hazardous waste and water quality. In 1995, SCAG assumed the responsibility for providing regional rideshare services through its Information Services Department.

Southern California Rideshare, a service of SCAG's Information Services Department and formerly Commuter Transportation Services, Inc., is the nation's oldest and largest commute management organization. Southern California Rideshare services all six counties within the SCAG region. The people at Southern California Rideshare believe that the quality of life and work is affected by transportation. Their mission is to improve commuter mobility by reducing single-occupant commute trips. Southern California Rideshare achieves its mission by providing transportation demand management information and services to more than 2,800 employer sites, nearly 400,000 commuters maintained in its data base, and decision-makers throughout the region.

1.2 PURPOSE OF THE STATE OF THE COMMUTE STUDY

The purpose of the State of the Commute study is to examine the commute behavior and attitudes of commuters living in Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties. Information is gathered on commuters' changing behavior and attitudes toward their current travel modes and routes, congestion, HOV lanes, employer programs and daily commute activity.

Data gathered through this ninth survey is compared with the results from previous surveys to identify trends and determine whether significant differences have occurred over time. With the annual surveys, SCAG remains abreast of the latest regional commuting trends and reports these findings to local organizations and agencies with a vested interest in transportation issues. By keeping a pulse on regional commuting behavior, SCAG and others are better able to meet the changing needs of the commuting public by improving marketing strategies and adapting services accordingly.

1.3 UTILIZATION OF FINDINGS

Findings from the 1999 survey are compared with the results from the previous surveys to determine whether travel behavior and attitudes have changed over the last eight years.

- ◆ Results from the survey are used to improve Southern California Rideshare's overall marketing strategy by identifying key market segments for its evolving mix of services. Attitudinal information regarding alternative modes, HOV lanes, and alternative routes is highly beneficial to the development and promotion of new services. Furthermore, updated information on commute satisfaction, commute concerns, commute stress, impact of commute-related issues on home and work location choices, and willingness to try alternative modes helps Southern California Rideshare to better position ridesharing to the general public.
- ◆ With a better understanding of gender, age, income, ethnicity, employer site size and county differences in commuting behavior and attitudes, Southern California Rideshare can more effectively promote ridesharing in these distinct markets.
- ◆ The identification of trends helps Southern California Rideshare develop strategic planning and marketing goals.

- ◆ Regional commute trends are tracked as this data is updated and reported to the media and other organizations and individuals with a vested interest in regional transportation.
- ◆ Monitoring the commuting activity of employees at both regulated and unregulated work sites assists legislators, regulators and others in gaining a better understanding of mandatory vs. voluntary ridesharing efforts.
- ◆ An investigation of commuting behavior and attitudes may assist policy makers and those with a vested interest in transportation issues in developing contingency plans in the wake of a regional disaster.

1.4 CHANGES IN THE REGULATORY ENVIRONMENT

Significant legislative changes occurred between 1988 and 1999 within Southern California pertaining to air quality and transportation issues; in particular, California Senate Bills 432 and 836, the South Coast Air Quality Management District's (SCAQMD) Rule 2202 (formerly Rule 1501.1, Rule 1501 and Regulation XV) and the Ventura County Air Pollution Control District's (VCAPCD) Employee Commute Options (Rule 211). Implemented in the late 1980s, Regulation XV and Rule 210 required particular employers (based on the number of employees at the work site) to develop employee trip reduction plans to decrease the number of single-occupant vehicles arriving at the work site during the morning peak hours. In December 1995, the state Legislature prohibited mandatory employer-based trip reduction rules except where required by federal law and mandatory trip reduction plans. At the same time, Congress amended the Clean Air Act to permit equivalent emission reduction strategies in lieu of the mandatory trip reduction rules. In response to both developments, the SCAQMD rescinded Rules 1501 and 1501.1 and replaced them with Rule 2202. Instead of mandating employers to implement an employee trip reduction program, the new rule provided a menu of emission and trip reduction strategies/mitigation measures from which to choose. However, in September 1996, Senate Bill 836 (Lewis) was enacted which temporarily raised the threshold of Rule 2202 from worksites with 100 employees to 250 employees starting January 1, 1997. Later, Senate

Bill 432 was signed into law in June 1998, permanently removing regulatory requirements at worksites with 100 to 249 employees.

1.5 THE SIGNIFICANCE OF CARPOOLING IN SOUTHERN CALIFORNIA

The role of carpooling in Southern California is significant. Given the dispersed pattern of jobs and housing within the region, the length of the commute that many commuters daily endure, and their somewhat limited travel options, carpooling remains the most accessible alternative commute option available to regional commuters.

Carpooling is the number one alternative to driving alone in the Los Angeles area. Carpooling moves over three times more workers than transit, according to the 1990 census (1,057,051 vs. 310,616).

The Los Angeles region has the highest metropolitan carpooling rate in the nation, according to the 1990 Nationwide Personal Transportation Study. Los Angeles is the only major metropolitan area in the nation where carpooling has been maintaining its relative market share. This finding is further supported by data from SCAG's State of the Commute study which shows that since 1990, carpooling as a primary travel mode has remained consistently around 14 percent.

Carpooling is the cheapest way to cut traffic and smog, according to an Apogee Research study for the National Association of Regional Councils. It costs significantly less to cut the number of cars on the road by forming carpools than by bus or rail.

Regionally we must sustain the existing carpool market share. Just a one percent drop in the carpooling rate translates into more than 40,000 additional vehicles on our freeways and surface streets daily which in turn results in an annual increase of 302 million vehicle miles of travel.

1.6 OUTLINE OF THE REPORT

This report consists of an executive summary, seven chapters, and three appendices.

The Executive Summary presents major findings, conclusions, and recommendations of the 1999 State of the Commute study.

Chapter 1 describes the purpose of the State of the Commute study and how the findings are utilized. A brief overview of the changes in the regulatory environment is also provided.

Chapter 2 details commuter behavior. Specifically, travel mode, travel distance, travel time, arrival and departure times, parking costs, freeway and alternate route usage, side trips taken before and after work, the need for an automobile during the work day, park and ride lot usage, and carpool and transit characteristics are addressed.

Chapter 3 describes the demographic characteristics of the respondents. This chapter also highlights commute behavior by gender, age, income, ethnicity, and employer site size.

Chapter 4 focuses on awareness and participation in employer transportation programs, including telecommuting and alternative work schedules, and recognition of Southern California Rideshare, the 1-800-COMMUTE telephone number, and the RideGuide.

Chapter 5 describes commuter attitudes and overall satisfaction with the commute in addition to commute stress, commute concerns, and willingness to try alternatives to driving alone. It also explores why commuters are unwilling to try other travel options, attitudes toward and use of HOV lanes, familiarity with regional public awareness campaigns and commuting costs.

Chapter 6 provides a summary of the critical findings by county.

Chapter 7 documents major demographic characteristics of workers whose primary workplace is home.

Appendices for the document immediately follow Chapter 7. A copy of the survey questionnaire is presented in Appendix A. A complete project documentation including the sampling methodology can be found in Appendix B. Appendix C provides a brief description and contact information of major transportation agencies in Southern California.

Please note that the 1996 State of the Commute survey findings presented in this report are slightly different from those reported in the 1996 State of the Commute Report because the weighting procedures for the 1996 survey data have been revised to be consistent with those from previous surveys. In addition, a new survey of at-home workers was conducted as part of the 1999 State of the Commute Survey. Due to this new survey and also to reduce telephone interview time, some questions in the 1998 survey were not asked in the 1999 survey. However, results of these eliminated questions from the 1998 survey are included in this report. Finally, the 1994 State of the Commute Report includes an additional chapter summarizing major findings from a regional survey of travel behaviors conducted just after the Northridge earthquake on January 17, 1994.

2 Travel Behavior

2.1 INTRODUCTION

Tracking travel characteristics is an essential component of analyzing regional travel behavior. Travel characteristics, such as primary transportation mode, commute distance and times, work place arrival and departure times, parking, freeway and alternate route usage, side trips taken before and/or after work, the need for a car during the work day, park and ride lot usage, and carpool and transit rider characteristics are all necessary ingredients in adequately portraying existing conditions. This chapter primarily reports on travel characteristics of all survey respondents. Further analysis of travel behavior by demographic characteristics are the focus of Chapter 3.

2.2 TRAVEL MODE

A travel characteristic of particular interest is the primary transportation mode which commuters use to get to and from work. A primary transportation mode is defined as the travel mode by which a commuter travels to work for more than half of their workdays in a typical week. Primary mode, regular mode, and usual mode are used interchangeably throughout the report. Data on the primary transportation mode used from the 1998 survey is compared with those from the previous surveys in Table 2.1.

As the total counts for the surveys show, 2,487 individuals responded in 1992; 2,591 in 1993; 2,625 in 1994; and 2,925 in 1996, 1998, and 1999 respectively. A ± 2.0 percent sampling error is normally associated with sample sizes of 2,500. At a 95 percent confidence level, the sampling error associated with a sample size of 2,925 is ± 1.8 percent. Unless otherwise noted, almost all statistics reported in this chapter have a similar sampling error of about ± 2 percent since these statistics are based on a random sample of 2,500-2,925 commuters designed to be representative of the regional commuter population. For a more detailed description of this and other sampling issues, please refer to Appendix B.

A historical look at primary travel mode over the last six surveys shows a relatively consistent occurrence in the drive alone rate (75.9-80.3%). The difference in the drive alone rate in 1999 compared to previous years is not statistically significant with the exception of 1996. However, the carpool rate has dropped steadily since 1996, almost back to where it was in 1992.

Of all the respondents to the survey, 74 percent always drive alone to work (including always drive-alone commuters who also telecommute part-time

TABLE 2.1

PRIMARY TRAVEL MODE												
Travel Mode	1992		1993		1994		1996		1998		1999	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Drive Alone	1,921	77.2%	2,042	78.8%	2,107	80.3%	2,219	75.9%	2,262	77.3%	2,296	78.5%
Motorcycle	4	0.2	13	0.5	7	0.3	4	0.1	28	0.9	3	0.1
Carpool	341	13.7	374	14.4	372	14.2	455	15.6	419	14.3	405	13.9
Vanpool	29	1.1	29	1.1	28	1.0	25	0.9	34	1.2	27	0.9
Public Bus	111	4.5	69	2.7	55	2.1	138	4.7	103	3.5	121	4.1
Private Bus	3	0.1	13	0.5	0	0.0	4	0.1	0	0.0	4	0.1
Commuter Rail	0	0.0	4	0.2	4	0.2	21	0.7	17	0.6	21	0.7
Bicycle	27	1.1	13	0.5	17	0.6	14	0.5	14	0.5	15	0.5
Walk or jog	51	2.1	34	1.3	35	1.3	44	1.5	49	1.7	32	1.1
Total:	2,487	100%	2,591	100%	2,625	100%	2,925	100%	2,925	100%	2,925	100%

or are on a compressed work week schedule). This is the same as reported in 1998 but higher than the 69 percent reported in 1996. Twenty-six percent use some form of alternative transportation (excluding always drive-alone commuters who also telecommute or are on a compressed work week schedule) either part or all of the time. This is broken down further to include the percent of commuters who rideshare full-time (3 or more days a week) (21%) and the percent of commuters who rideshare part-time (1 or 2 days a week) (5%). These figures are virtually the same as the 1998 findings (26%, 22%, and 4% respectively).

In a separate question, 14 percent of current always drive-alone commuters indicated that they had regularly carpooled, vanpooled or used transit within the past year. This is about the same as reported in 1998 (13%) and 1996 (15%) but higher than the 10 percent reported in 1994. When former ridesharers were asked why they quit their arrangement, 21 percent cited that their work schedule changed, 18 percent claimed that they got a car or got their car fixed, 13 percent reported that the rideshare arrangement became unreliable, and 10 percent each cited that the other ridesharer quit or that they had changed jobs or work site locations. Only nine percent reported that they needed their vehicle at or after work. About seven percent reported that it took too much time.

2.3 COMMUTING DISTANCE

According to the 1999 survey, the average self-reported distance to work is 16.2 miles, and the median distance, 12.0 miles. (A median is the distance or other characteristic being measured for which exactly half the values are larger, and half are smaller.) This finding is consistent with findings from surveys conducted in all previous years with the exception of 1993 when the average distance to work dipped to 14.8 miles (see Table 2.12 on page 14). Trip distances to work ranged from 0.25 mile to 125 miles. The average commute distance is significantly higher than that based on the 1990 Census data partly due to the difference in definition of workers between the State of the Commute Survey and the 1990 Census. The State of the Commute Survey includes only commuters who are 18 years or older and work outside their home 35 hours or more in a week. Part-time workers are not included in this study.

Table 2.2 shows the frequency distribution of one-way commute distances from 1992 through 1999.

2.4 COMMUTING TIME TO AND FROM WORK

It takes respondents to the 1999 survey an average of 34 minutes to get to work, with a median of 30 minutes. The mean time for the trip home is 41 minutes, with a median of 30 minutes. With the exception of the same median travel time back home, commuting times to and from work are

TABLE 2.2

ONE-WAY COMMUTING DISTANCE												
	1992		1993		1994		1996		1998		1999	
Distance	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Under 5 miles	515	23%	544	22%	620	24%	578	20%	577	20%	620	21%
5 to 9 miles	405	18	579	23	490	19	570	20	580	20	520	18
10 to 14 miles	348	16	425	17	389	15	499	17	498	17	490	17
15 to 19 miles	245	11	239	10	241	10	349	12	295	10	343	12
20 to 24 miles	190	9	212	9	195	8	267	9	288	10	284	10
25 to 29 miles	123	6	107	4	155	6	144	5	169	6	156	5
30 to 34 miles	111	5	117	5	163	6	148	5	115	4	135	5
35 to 39 miles	56	3	58	2	79	3	77	3	116	4	71	3
40 to 44 miles	46	2	63	3	47	2	54	2	109	4	89	3
45+ miles	156	7	125	5	185	7	204	7	160	5	187	6
Total:	2,195	100%	2,469	100%	2,564	100%	2,891	100%	2,907	100%	2,895	100%

slightly longer than those reported in 1998 (see Table 2.12 on page 14). Tables 2.3 and 2.4 show the frequency distribution of commute time to and from work respectively from 1992 to 1999.

A conservative approach was taken beginning in 1990 for estimating trip time. Responses of those who reported making side trips were eliminated since stops along the way prolonged the time it took to make the trip and the duration of these stops was not captured in the survey. Furthermore, those who report an average travel speed of more than 75 miles per hour or traveling more than three hours to get to

work or more than four hours to get home from work were not included in the calculation. This same approach was used in subsequent years.

Because of the keen interest in the travel time issue, two sets of different questions were asked regarding travel time. In the first set of questions, commuters were asked what time they left home for work, what time they arrived at work, what time they left work for home, and what time they arrived at home the day of the survey. The commuting times reported in the first paragraph of this section are based on this set of questions. In the second set of questions,

TABLE 2.3

COMMUTING TIME FOR TRIP TO WORK												
	1992		1993		1994		1996		1998		1999	
Trip Time	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
0 to 14 min.	308	16%	351	17%	445	22%	471	23%	319	15%	430	19%
15 to 29 min.	555	29	667	33	583	30	668	32	781	36	707	31
30 to 44 min.	465	25	442	22	479	24	437	21	564	26	471	21
45 to 59 min.	177	9	230	11	178	9	230	11	167	8	315	14
1 hr. to 1:14	194	10	216	10	164	8	107	5	181	8	196	9
1:15 to 1:29	60	3	50	2	49	3	62	3	45	2	38	2
1:30 to 1:44	50	3	56	3	54	3	60	3	58	3	46	2
1:45 to 1:59	16	1	17	1	8	0	18	1	15	1	11	1
2 hours or more	71	4	21	1	28	1	28	1	26	1	39	2
Total:	1,896	100%	2,050	100%	1,988	100%	2,083	100%	2,156	100%	2,254	100%

TABLE 2.4

COMMUTING TIME FOR TRIP HOME												
	1992		1993		1994		1996		1998		1999	
Trip Time	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
0 to 14 min.	237	14%	221	12%	266	16%	355	19%	245	12%	331	15%
15 to 29 min.	428	25	536	30	454	28	531	28	598	30	609	28
30 to 44 min.	446	26	459	26	419	25	415	22	510	25	427	20
45 to 59 min.	189	11	193	11	146	9	287	15	220	11	351	16
1 hr. to 1:14	181	10	197	11	194	12	109	6	247	12	206	9
1:15 to 1:29	62	3	53	3	52	3	56	3	66	3	50	2
1:30 to 1:44	81	5	68	4	50	3	83	4	57	3	102	5
1:45 to 1:59	21	1	11	1	9	1	21	1	23	1	32	2
2 hours or more	86	5	40	2	47	3	46	2	53	3	70	3
Total:	1,731	100%	1,778	100%	1,637	100%	1,902	100%	2,019	100%	2,177	100%

commuters were asked how many minutes it takes them to travel to work and return home, implying usual activity. Commuters report that it usually takes them 30 minutes to get to work, with a median of 25 minutes, and 35 minutes to return home, with a median of 30 minutes. Obviously, these self-reported times are considerably less than the calculated times reported in the first paragraph of this section. Again, self-reported times by commuters are longer than last year's results.

2.5 WORK PLACE ARRIVAL AND DEPARTURE TIMES

Arrival and departure time results from the 1999 survey are compared with previous survey results in Tables 2.5 and 2.6.

Arrival time before 6 a.m. includes all those who report to work after midnight. The share of commuters arriving at work after 10 a.m. is lower this year than in 1998. The mean arrival time at work is

TABLE 2.5

ARRIVAL TIME AT WORK												
Time (A.M.)	1992		1993		1994		1996		1998		1999	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Before 6:00	176	8%	156	6%	263	10%	260	9%	246	9%	290	10%
6:00 to 6:29	122	5	137	6	118	5	135	5	154	5	172	6
6:30 to 6:59	213	9	265	11	248	10	271	9	290	10	297	10
7:00 to 7:29	277	12	311	12	269	11	382	13	389	13	350	12
7:30 to 7:59	383	16	385	16	372	15	408	14	465	16	436	15
8:00 to 8:29	374	16	427	17	363	14	457	16	407	14	472	16
8:30 to 8:59	220	9	282	11	253	10	265	9	301	10	219	8
9:00 to 9:29	168	7	158	6	211	8	178	6	173	9	192	7
9:30 to 10:00	112	5	128	5	107	4	100	3	65	2	84	3
After 10:00	317	13	250	10	346	13	462	16	434	15	368	13
Total:	2,362	100%	2,499	100%	2,550	100%	2,917	100%	2,925	100%	2,880	100%

TABLE 2.6

DEPARTURE TIME FROM WORK												
	1992		1993		1994		1996		1998		1999	
Trip Time (P.M.)	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Before 3:00	369	16%	356	15%	432	17%	464	16%	459	16%	510	17%
3:00 to 3:29	174	7	171	7	165	7	198	7	165	6	183	6
3:30 to 3:59	212	9	157	6	174	7	266	9	241	8	213	7
4:00 to 4:29	275	12	282	11	278	11	341	12	374	13	360	12
4:30 to 4:59	285	12	351	14	319	13	311	11	323	11	268	9
5:00 to 5:29	449	19	449	18	441	18	450	15	515	17	497	17
5:30 to 5:59	182	8	203	8	212	8	265	9	182	6	248	9
6:00 to 6:29	171	7	193	8	212	8	213	7	229	8	239	8
6:30 to 7:00	106	5	157	6	131	5	114	4	120	4	165	6
After 7:00	120	5	173	7	150	6	294	10	317	11	241	8
Total:	2,343	100%	2,492	100%	2,514	100%	2,917	100%	2,925	100%	2,925	100%

8:25 a.m., with a median arrival time at 7:50 a.m. In 1998, the mean arrival time at work was 8:35 while the median arrival time was 7:50 a.m.

Overall, departure times are consistent with previous survey findings. The mean departure time from work was 4:06 p.m., with a median departure time of 4:30 p.m. In 1998, the mean departure time from work was 4:17 while the median departure time from work was the same at 4:30 p.m.

2.6 PARKING

Ninety-four percent of area commuters receive free parking at their work site. This is consistent with findings from previous surveys. The employee's share of parking costs is illustrated in Table 2.7.

As can be seen by the consistency in the findings over the years, free parking in the region is still abundantly available.

Of the employees who pay for parking, 55 percent pay less than \$40 per month. The distribution of parking fees paid by employees is found in Table 2.8. Respondents to the 1999 survey who pay for parking pay an average of \$50 per month; the median is \$34.

The average monthly parking fees was \$63 in 1998, \$54 in 1996, \$70 in 1994, and \$66 in 1993. Note that the size of samples upon which the parking fees are estimated is small (ranging from 123 to 208 respondents), resulting in a higher sampling error of ± 6.9 to ± 9.8 percent at a 95 percent confidence level.

2.7 FREEWAY BEHAVIOR

Sixty-one percent of all participants travel on a freeway as part of their commute. The percentage was 55 percent in 1998, 60 percent in 1996, 55 percent in 1994, 56% in 1993, and 53 percent in 1992.

2.8 ALTERNATE ROUTE USAGE

Respondents were asked if they ever change their usual route and take an alternate route when traffic is jammed. Sixty-five percent report that they do take alternate routes, about the same as reported in 1998 (67%). If radio traffic reports included alternate route information in their broadcasts, 52 percent of the respondents report they would be very likely, 17 percent would be somewhat likely, and 16 percent would be very unlikely to use the alternate route. The percentages were 43, 21, and 19 percent respectively in 1998.

TABLE 2.7

EMPLOYEE SHARE OF PARKING COST												
Monthly Fee												
Paid by	1992		1993		1994		1996		1998		1999	
Employee	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
All	74	3%	118	4%	129	5%	116	4%	124	4%	110	4%
Some	57	3	71	3	64	3	91	3	56	2	45	2
None	2,221	94	2,397	93	2,335	92	2,686	93	2717	94	2729	94
Total:	2,352	100%	2,586	100%	2,528	100%	2,893	100%	2,897	100%	2,884	100%

TABLE 2.8

EMPLOYEE PARKING FEES												
Monthly Fee												
Paid by	1992		1993		1994		1996		1998		1999	
Employee	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
\$1 to \$39	75	61%	74	44%	62	34%	82	39%	89	51%	85	55%
\$40 to \$79	50	29	71	37	97	47	42	24	43	27.9	43	28%
\$80 or more	17	14	45	27	54	29	29	14	44	25	26	17
Total:	123	100%	169	100%	187	100%	208	100%	175	100%	154	100%

TABLE 2.9

	INCIDENCE OF STOPPING ON WAY TO WORK OR HOME					
	1992	1993	1994	1996	1998	1999
Stopped on Way to Work	19%	20%	22%	25%	23%	20%
Stopped on Way Home	24	29	34	32	28	23
Stopped on Way to Work or Home (Net)	36	40	45	44	40	35

2.9 SIDE TRIPS TAKEN BEFORE AND/OR AFTER WORK

Twenty percent of all respondents report that they made a stop on the way to work the day they were surveyed. This is lower than the 23 percent reported in 1998 and 25 percent reported in 1996. Of these, 90 percent made one stop, eight percent made two stops and two percent made three or more stops. The most significant reasons for the stops include;

- ◆ To take a child to day care or school (33%);
- ◆ To eat (26%);
- ◆ To buy gasoline (16%);
- ◆ To pick up or drop off carpool/vanpool partner/change mode (13%).

With respect to the return trip home, 23 percent of the respondents report that they made a stop on the way home the day they were surveyed. This is lower than findings from previous surveys (28-34%). Of those making stops, 85 percent made one stop, 13 percent made two stops and only two percent made three or more stops. The most significant reasons for the stops include:

- ◆ To buy groceries/go shopping (28%);
- ◆ To pick up a child from day care or school (28%);
- ◆ To eat (11%);
- ◆ To buy gasoline (10%).

Slightly more commuters make stops on their trip home than they do on their trip to work (23% vs. 20%) (see Table 2.9).

2.10 AVAILABILITY OF VEHICLE FOR GETTING TO WORK

Eighty-nine percent of all respondents report always having a vehicle available for getting to work. Six percent claim a vehicle is sometimes available, and five percent state they never have a vehicle available. This is consistent with data from previous surveys.

According to the 1998 survey, the average number of motorized vehicles (including automobiles, trucks, vans, and highway motorcycles owned or leased) per household was 2.5 with a median of 2.0¹.

2.11 NEED FOR VEHICLE DURING THE WORK DAY

The average number of days a week commuters need their vehicle at work for either business or personal reasons is 2.7. Even for those in senior management and construction, where the need for a vehicle is higher, ridesharing one day a week can still be a viable option.

Thirty-six percent of all respondents claim they don't need their vehicle at work at all for either business or personal reasons. This is lower than the 42 percent reported in 1998 and 41 percent reported in 1996 but is in line with the 32 percent reported in 1994.

According to the 1998 survey², twenty-four percent of the respondents claimed they needed their vehicle at work five days or more per week for business purposes, slightly higher than the 22 percent reported in 1996 but significantly lower than the 30 percent reported in 1994. Another 59 percent claimed they didn't need their vehicle at work at all for business purposes (about the same as reported in 1996). The remaining 17 percent were dispersed as to the number of days they need their vehicle at work for business purposes.

¹ This question was not asked in the 1999 survey.

² Questions about the breakdown of vehicle needs by purpose were not asked in the 1999 survey.

Similarly, 15 percent of all respondents claim they need their vehicle at work five or more days per week for personal reasons. This is lower than the 17 percent reported in 1996 and the 19 percent reported in 1994. Fifty-eight percent claim they don't need their vehicle at work at all for personal reasons, up from 55 percent reported in 1996 and 50 percent in 1994. The remaining 27 percent are dispersed as to the number of days they need their vehicle at work for personal reasons.

2.12 PARK AND RIDE LOT USAGE

Three percent of the respondents reported using a park and ride lot during the past week in their commute to work. This figure was about the same in 1996 and 1998 but higher in 1994 (6%).

2.13 CARPOOL³ AND VANPOOL⁴ CHARACTERISTICS

Persons who report that they commute in carpools or vanpools one or more days per week were asked how many people they pool with and their relationship to those people. The average carpool size is 2.6 persons with a median of 2, including the respondent. This data is comparable to previous studies. The average vanpool size is 5.0 persons, representing a steady decline in vanpool size over the past seven years (7.0 persons in 1998, 7.8 persons in 1996 and 1994, 8.8 persons in 1993, and 10.4 persons in 1992). On average, carpools report a commute distance of 17.2 miles (median 15 miles) and vanpoolers, 17.1 miles (median 15 miles).

When asked to describe their relationship with carpool partners, commuters indicate that 36 percent of fellow poolers are co-workers (see Table 2.10). This figure is virtually the same as in 1998 (37%) but is significantly lower than the 45 percent reported in 1996. The figure was 47 percent in 1994, 42 percent in 1993, and 37 percent in 1992. The negative impact of air quality deregulation on employer transportation programs recently may have contributed to the relative decline of co-worker carpools. However, co-worker carpools are still more likely at the larger and regulated work sites. Forty-five percent of carpools are made up of co-workers at sites with 250 or more employees as opposed to 32 percent at sites with fewer than 250 employees.

Carpooling with household members is the most common type of arrangement (55%), the same as in 1998 but higher than the 49 percent reported in 1996. A new question was added in 1993 to determine more about household members. Of those who report carpooling with household members, 78 percent report that the household member is older than 16 years of age.

Friends and neighbors account for 13 percent of carpool partners, and non-household relatives, seven percent. Those respondents who mentioned that they ride with co-workers or friends and neighbors were further asked if these were originally names of people from a matchlist. Those who report that their partners were someone from a matchlist represent two percent of pooling members. This figure was lower than findings from previous surveys (7% in 1998, 6% in 1996, and 10% in 1994). The relationship to persons within the pooling arrangement is detailed in Table 2.10.

The distinction between co-worker carpools and family and friend carpools is important to note given the difference in commute characteristics between these two groups. These characteristics are highlighted in Table 2.11.

A new question was added in 1993 to determine where carpool partners meet. Sixty-six percent report that whoever drives picks up the others at home, nine percent drive to the driver's home, nine percent live close enough to walk to the driver's home, and eight percent meet at a central location.

According to the 1998 survey⁵, seventy-seven percent of carpools claimed they did not have to travel out of their way to link up with other partners. This figure was 73 percent in 1996 and 77 percent in 1994. Of those who did travel out of their way (23%), the average distance was 5.4 miles. Eighty-six percent of carpools claimed they did not have to travel out of their way at the work end because of their carpool arrangement. Of those who did travel out of their way (14%), the average distance was 3.1 miles.

³ Based on 515 respondents, representing a sampling error of about $\pm 5\%$ at 95% confidence level.

⁴ Based on 32 respondents. Caution should be used in determining the characteristics of vanpools given the small sample of vanpoolers surveyed.

⁵ Questions were not asked in the 1999 survey.

TABLE 2.10

RELATIONSHIP TO PERSONS WITHIN CARPOOL OR VANPOOL												
	1992		1993		1994		1996		1998		1999	
Relationship	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Household Members	222	43%	211	42%	198	39%	319	49%	318	55 %	304	55%
Non-household Relatives	33	6	16	3	13	3	17	3	42	7	39	7
Co-Workers (Non-Matchlist)	165	32	181	36	202	40	265	41	187	32	194	35
Co-Workers (Matchlist)	25	5	28	6	35	7	27	4	29	5	4	1
Friends, Neighbors (Non-Matchlist)	51	10	58	12	66	13	50	8	41	7	68	12
Friends, Neighbors (Matchlist)	20	4	20	4	17	3	4	1	9	2	5	1
Someone from Matchlist	2	0	2	0	1	0	8	1	2	0	2	0
Total:	397	100%	516	103%*	532	105%*	690	107%*	582	108%*	553	111%*

* Total exceeds 100% because respondents were permitted more than one response.

While the number of vanpoolers identified in the survey is too few to accurately assess trends, findings are reported to provide a general description of vanpool characteristics. Vanpoolers are as likely to pool with family members (52%) as with co-workers (51%). In 1993, a new question was added to determine where vanpool partners meet. Seventy-three percent are picked up by the driver at their home while twenty-seven percent meet at a central location.

As a group, 19 percent of African-Americans carpool to work on a full-time basis as opposed to 18 percent of Hispanics, 12 percent of Whites (not of Hispanic origin), and eight percent of Asians.

In general, the younger the commuter, the more likely the commuter carpools to work on a full-time basis (19% for commuters under 20 years old vs. 6% for commuters 60 years or older). Those with

household incomes of less than \$20,000 are much more apt to carpool on a full-time basis than those with household incomes of \$20,000 or more (20% vs. 13%).

Respondents report being in their current carpool an average of 31 months and a median of 17 months. Fifty percent claim to be in their current carpool one year or less. Part-time carpools have been in their most recent carpool less time than full-time carpools (22 months vs. 34 months).

Respondents report being in their current vanpool an average of 47 months and a median of five years. Thirty percent claim to be in their current vanpool one year or less.

Those who began ridesharing within the past year were asked about prior travel modes. More than seven out of ten (71%) who began ridesharing dur-

TABLE 2.11

PRIMARY DIFFERENCES BETWEEN CO-WORKER AND FRIEND/FAMILY CARPOOLS*

	Co-Worker Carpools	Friend/Family Carpools
Commute Distance (average one-way miles)	23.6	15.1
Use Freeway	78.3%	58.1%
Use HOV lanes (if available)	36.6%	22.5%
Months Carpooling (average)	28	34
Most Important Mode-Choice Factor:	30 cases	75 cases
Travel Time	22%	19%
Cost/Save Gas	18%	4%
Convenience/Flexibility	17%	24%
Employer Offers Money to Ridesharers	22%	9%
Heard/Seen/Read Rideshare Advertising in Past 12 Months	43%	52%
Heard of 1-800-Commute	40%	37%
Company Size:		
Under 100 Employees	54%	67%
100 Employees and over	46%	33%
Household Income:		
Under \$50,000	51%	56%
\$50,000 and Over	49%	44%
Gender: Male	55%	47%
Ethnicity:		
White, non-Hispanic	44%	35%
Hispanic	38%	45%
African-American	9%	6%
Asian	7%	9%
Other	2%	5%
Base:	154 (5.3%) of the sample	354 (12.1%) of the sample

*Carpools composed of both co-workers and friends/family were considered co-worker carpools.

ing the past year previously drove alone. Eleven percent carpoled, nine percent took the bus, seven percent walked, and four percent did not work prior to ridesharing.

According to the 1998 survey⁶, those who began ridesharing within the last year were asked what motivated them to begin to rideshare. Twenty-eight percent of the respondents claimed they began ridesharing to save money, 14 percent reported personal vehicle problems, 12 percent reported that they found someone living and working close by, and seven percent claimed that a co-worker suggested the idea.

2.14 CHARACTERISTICS OF BUS RIDERS⁷

Those who report traveling to work on a bus, either public or private, at least one day per week, were asked how long they have been riding the bus. Bus riders claim to have been riding the bus an average of 65 months (5.4 years) and a median of three years. Thirty-five percent report riding the bus two years or less, whereas 16 percent report riding the bus 10 years or more. Sixty-nine percent of bus riders report using the bus five or more days a week to get to work. The average trip distance for bus riders is 11.6 miles with a median of 6.0 miles.

⁶ The motivation question was not asked in the 1999 survey.

⁷ Based on 155 respondents, representing a sampling error of about $\pm 8.0\%$ at 95% confidence level.

Nine percent of African-Americans ride the bus to work three or more days a week, followed by eight percent of Hispanics, four percent of Asians, and two percent of Whites (not of Hispanic origin).

Those who do not currently use the bus were asked if there was a bus that they could take to get to work. Thirty-eight percent of these commuters believe there is a bus they could take to get to work. This figure was 41 percent in 1998, 32 percent in 1996, 39 percent in 1994 and 45 percent in 1993.



2.15 MAJOR DIFFERENCES BETWEEN THE FULL-TIME⁸ AND PART-TIME⁹ RIDESHARER

Compared to the full-time (three or more days a week) ridesharer, the part-time (one or two days a week) ridesharer faces a shorter commute distance (11.5 vs. 16.6 miles) and a shorter commuting time each day (73 vs. 88 minutes). Part-time ridesharers have a greater need for a vehicle at work for either business or personal reasons one or more days a week (73% vs. 40%). Part-time ridesharers are more likely than full-time ridesharers to always have a vehicle available to get to work (83% vs. 67%). According to the 1998 survey, part-time ridesharers are more likely to have more than one job (32% vs. 15%)¹⁰.

Part-time ridesharers have been at their current work location for a shorter period of time than full-time ridesharers (41 months vs. 65 months). Occupationally, part-time ridesharers are more apt to be

sales/service (38%) or professional workers (19%). Full-time ridesharers are also more apt to be sales/service workers (29%) or professional (19%).

Ethnically, part-time ridesharers are more apt than full-time ridesharers to be White (not of Hispanic origin) (42% vs. 32%) and less likely to be Hispanic (41% vs. 53%). Part-time ridesharers are about the same likely as full-time ridesharers (62% vs. 63%) to be aware of at least one transportation incentive at their work site). Part-time ridesharers are much more likely to use financial incentives offered by their employer than full-time ridesharers (83% vs. 63%).

The most important mode choice factor is reliability for part-time ridesharers (42%) and travel time to work for full-time ridesharers (19%). These differences mark the full-time ridesharer and the part-time ridesharer as distinct markets.

2.16 SUMMARY OF DIFFERENCES BETWEEN THE 1999 SURVEY AND PREVIOUS SURVEYS

Commuters in 1999 travel relatively the same distances to work as their counterparts did from 1992 through 1998 but are taking a slightly more time to make the trip. The drive-alone rate has been fairly consistent over the last nine years. Table 2.12 presents a summary of measures from previous annual surveys. Table 2.13 highlights the differences in commuting characteristics between regular drive-alone commuters¹¹ and carpoolers¹².

⁸ Based on 628 respondents, representing a sampling error of about $\pm 4.0\%$ at 95% confidence level.

⁹ Based on 145 respondents, representing a sampling error of about $\pm 8.0\%$ at 95% confidence level.

¹⁰ The question was not asked in the 1999 survey.

¹¹ Based on 2,296 respondents, representing a sampling error of about $\pm 2.0\%$ at 95% confidence level.

¹² Based on 405 respondents, representing a sampling error of about $\pm 5.0\%$ at 95% confidence level.

TABLE 2.12

SUMMARY OF MEASURES ACROSS SURVEYS						
Measure	1992	1993	1994	1996	1998	1999
Percentage of Solo Drivers (including motorcyclists)	77%	79%	81%	76%	77%	79%
Mean Distance to Work (miles)	16.6	14.8	16.5	16.5	16.1	16.2
Median Distance to Work (miles)	10.0	10.0	10.0	12.0	11.0	12.0
Mean Time to Work (minutes)	36	33	31	33	32	34
Median Time to Work (minutes)	30	30	25	30	25	30
Mean Time to Home (minutes)	40	36	36	37	37	41
Median Time to Home (minutes)	30	30	30	30	30	30
Modal Arrival Time at Work During Peak Hours	7:30 to 8:29 a.m.	8:00 to 8:29 a.m.	7:30 to 7:59 a.m.	8:00 to 8:29 a.m.	7:30 to 7:59 a.m.	8:00 to 8:29 a.m.
Modal Departure Time from Work During Peak Hours	5:00 to 5:29 p.m.	5:00 to 5:29 p.m.	5:00 to 5:29 p.m.	5:00 to 5:29 p.m.	5:00 to 5:29 p.m.	5:00 to 5:29 p.m.
Percentage of Commuters Receiving Free Parking	94%	93%	92%	93%	94%	95%

TABLE 2.13

**SUMMARY COMPARISON OF
PRIMARY DRIVE ALONE COMMUTERS AND CARPOOLERS**

	Drive Alone Commuters	Carpool Commuters
Trip Distance (average)	16.2 miles	18.1 miles
Trip Time to Work (average)	32 minutes	35 minutes
Trip Time to Home (average)	38 minutes	43 minutes
At Work Before 8:00 a.m.	52%	64%
Make Stops on Way to Work	18%	35%
Make Stops on Way Home	22%	34%
Receive Free Parking	95%	93%
Average Parking Price Paid/Month	\$43.36 (120 cases)	\$74.95 (29 cases)
Employer Size		
• Less than 25 Employee	38%	31%
• 100 Employees or more	38%	39%
Need Vehicle at Work for Business/Personal Reasons	70%	52%
Days Per Week Need Vehicle at Work (average)	3.1 days	2.0 days
Occupation		
• Production	9%	15%
• Professional	26%	21%
• Middle Management	11%	8%
• Construction	5%	8%
Industry		
• Service, Entertainment	20%	23%
• Transportation, Communications, Electric, Gas & Sanitary Services	11%	9%
• Finance, Banks, Insurance or Real Estate	8%	6%
• Wholesale Trade	4%	1%
Household Income		
• Less than \$20,000	8%	19%
• More than \$80,000	27%	21%
Ethnicity		
• White	50%	39%
• Hispanic	32%	46%
• Asian	10%	5%
• African-American	5%	8%
Vehicle Always Available	96%	84%
Heard of 1-800-COMMUTE	32%	38%
Would Availability of HOV Lanes Encourage You to Rideshare?	37%	66%
Commuting Costs as Mode Choice Factor	6%	15%
“Convenience” Defined as:		
“Don’t Have to Plan Ahead”	23%	9%
“Reliability/Dependability”	9%	9%
Base:	2,296	405

3 Demographic Characteristics

3.1 INTRODUCTION

To better understand regional commuters, it is not only important to know about their overall travel behavior but also the composition of the commuter groups and their travel behaviors. In many instances, differences in commute behavior may be a result of differences in demographics. Significant differences between groups of people are highlighted throughout this document. By realizing these differences, marketing strategies can be targeted so that the most effective messages are delivered to the appropriate audiences. This chapter reports on travel behaviors by gender, age, income, ethnicity, and employer site size. Additional demographic characteristics of regional commuters are also reported at the end of this chapter.

The sampling errors associated with the summary statistics of demographic groups in this chapter depend on the sample size of these groups. Table 3.1 below lists sampling errors by sample size at a 95 percent confidence level.

However, it is important to note that the sampling errors associated with any sub-samples of the overall sample may not be estimated accurately since these

sub-samples are formed based on demographic characteristics and may not be representative of their respective populations. Their actual sampling errors are likely to be higher than those shown in Table 3.1.

3.2 TRAVEL BEHAVIOR BY GENDER

Gender Distribution Respondents to the 1999 survey are 54 percent male and 46 percent female. [Note: According to the 1990 U.S. Census, 56.8 percent of workers (16 years of age and over) are male and 43.3 percent are female]. Overall, these results are consistent with findings from previous surveys (see Table 3.2).

Primary Travel Mode Men are somewhat more likely than women to drive alone to work on a regular basis (81% vs. 76%) and are less likely than women to carpool to work (12% vs. 17%).

One-Way Commute Distance On average, men travel longer distances than women to get to work (17.4 miles vs. 14.9 miles). In looking at the greatest trip distances - 12 percent of men travel more than 40 miles to work while only seven percent of women do so.

TABLE 3.1

SAMPLING ERRORS BY SAMPLE SIZE											
Sample Size	100	200	300	400	600	800	1000	1500	2000	2500	3000
Sampling Error (%)	9.8	6.9	5.6	4.9	4.0	3.5	3.1	2.5	2.2	1.9	1.8

Source: Calculated based on a formula in Douglas Downing & Jeffrey Clark, Business Statistics, 2nd edition, Barron's Business Review Series, 1992, p. 226

TABLE 3.2

GENDER DISTRIBUTION												
Gender	1992		1993		1994		1996		1998		1999	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Female	1,186	47%	1,274	49%	1,199	46%	1,350	46%	1,354	46%	1,332	46%
Male	1,326	53	1,317	51	1,426	54	1,575	54	1,571	54	1,593	54
Total:	2,512	100%	2,591	100%	2,625	100%	2,925	100%	2,925	100%	2,925	100%

Commute Time to and from Work Perhaps as a result of the longer trip distance, men spend, on average, more time than women commuting each day (75 minutes vs. 69 minutes).

Full-time and Part-time Ridesharing Women are more likely to be full-time (three or more days a week) ridesharers (24% vs. 19%) than men. But there is little difference in terms of part-time ridesharing (one or two days a week) between men and women (5% vs. 6%).

Motivation to Rideshare¹⁴ According to the 1998 survey, men were much more likely to cite cost savings (40% vs. 16%), car problems (18% vs. 10%), and environmental reasons (9% vs. 4%) as a motivation for ridesharing. Women were more likely than men to report that “better parking” (10% vs. 0%), “found someone living and working close by” (14% vs. 8%), and availability of new options such as new bus route or train (11% vs. 5%) motivated them to rideshare.



Consideration of Alternative Modes When those individuals who always drive alone were asked whether they would consider ridesharing alternatives, men and women were equally open to carpooling (31% vs. 33%), vanpooling (both 26%), train (both 16%), and bus (12% vs. 14%). Men were more likely to consider biking (21% vs. 14%) while women were more likely to consider walking (20% vs. 10%) as a travel alternative.

Freeway Usage Perhaps due to the longer trip distances, men are much more likely than women to travel on a freeway during their commute to work (66% vs. 55%).

HOV Lane Usage Women are more likely than men to utilize HOV lanes (70% vs. 58%) maybe because women are more likely to be full-time ridesharers than men.

Make Stop(s) on Way to Work or Home Women are more likely than men to make stops on the way to or from work. Of those making stops on the way to work (representing 23% of women and 18% of men), eight percent of men made more than one stop, while 12 percent of women did so. Reasons for the stops differ between the sexes. Women are much more likely than men to stop to take a child to day care or school (47% vs. 19%), while men are more likely to stop to eat (30% vs. 23%), buy gasoline (20% vs. 13%), or pick up/drop off a rideshare partner (14% vs. 11%). Of those who make stops on the way home (representing 32% of women and 16% of men), 13 percent of men made more than one stop while 16 percent of women did so. Women are more apt than men to pick up a child from day care or school (35% vs. 15%) or go shopping/buy groceries (32% vs. 23%), while men are more likely to stop to eat (17% vs. 8%) or buy gasoline (14% vs. 8%).

Vehicle Availability Women are nearly as likely as men to report always having a vehicle available for commuting purposes (89% vs. 90%).

Change Work or Home Location due to Commute Distance Women are more likely than men to cite commute distance as a factor for changing work location (16% vs. 11%) but are less likely to cite commute distance as a factor for changing home location (11% vs. 14%).

3.3 TRAVEL BEHAVIOR BY AGE

Age Distribution Sixty percent of the respondents were under 40 years of age, the same as reported in 1996 and 1998 but reflecting an older audience than in previous years. The age distribution for respondents to each of the surveys is presented in Table 3.3. The original six age categories are regrouped into four categories so that each category has a similar number of respondents to allow for more meaningful analysis. About 30 percent of all commuters are under 30 years, 30 percent are between 30 and 39, 22 percent are between 40 and 49, and 18 percent are 50 years or older.

¹⁴ The motivation question was not asked in the 1999 survey.

Primary Commute Mode On average, the older a commuter is, the more likely the commuter drives alone to work (ranging from 72% for commuters less than 30 years of age to 85% for commuters 50 years of age or older) and the less likely the commuter carpools to work (ranging from 17% for commuters less than 30 years old to only 8% for commuters 50 years or older).

One-Way Commute Distance On average, the one-way commute distance is the longest for the 40-49 year age group (17 miles), and the shortest for the under 30 age group (15 miles).

Commute Time to and from Work The oldest group spend less time commuting each day (68 minutes) than the other three age groups (72 to 76 minutes).

Full-time and Part-time Ridesharers On average, commuters under 30 years of age are the most likely to be full-time or part-time ridesharers (28% and 8% respectively) while commuters 50 years of age or older are the least likely (15% and 1% respectively).

Ridesharing Alternatives for Always Drive-Along Commuters In general, the younger the drive-alone commuter, the more likely the commuter would consider carpooling, vanpooling, taking a bus, riding a train, or biking one or two days a week to work. Of all ridesharing alternatives, carpooling is the most preferred across all age groups, ranging from 23 percent for the 50 and over age group to 41 percent for the under 30 age group.

Make Stop(s) on Way to Work or Home Commuters in the 40-49 year age group are the most likely to make a stop on the way to work (25%) or home (27%), while the 50 and over age group are the least likely to make a stop on the way to work (15%) and the under 30 age group are the least likely to make a stop on the way home (17%).

Availability of Vehicle to Work Fewer commuters in the under 30 age group (85%) report that they always have a vehicle available to travel to work than the other three age groups (91-92%).

Change Work or Home Location due to Commute Distance Commuters in the 30-39 age group are the most likely to change their work location because of commute distance while commuters in the 50 and over age group are the least likely (16% vs. 8%). Commuters in the 50 and over age group are the most likely to change their home location because of commute distance while commuters in the 40-49 age group are the least likely (17% vs. 12%).

3.4 TRAVEL BEHAVIOR BY INCOME

Distribution of Household Income Reflecting the economic recovery/growth in the late 90s, significantly more individuals in the highest income category of \$100,000 or more were interviewed for the 1999 survey than for the 1992 survey (15% vs. 9%) (see Table 3.4). The original seven income categories are regrouped into four categories so that each category has about the same number of respondents to allow more meaningful breakdown analysis. About 30 percent of all commuters have a household

TABLE 3.3

AGE DISTRIBUTION												
	1992		1993		1994		1996		1998		1999	
Age in Years	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Less than 20	131	5%	73	3%	110	4%	94	3%	76	3%	77	3%
20 - 29	776	31	790	31	810	32	834	28	817	28	790	27
30 - 39	788	32	799	31	776	30	904	31	834	29	872	30
40 - 49	484	20	499	19	479	19	662	23	633	22	627	22
50 - 59	228	9	286	11	242	11	342	12	414	14	410	14
60+	67	3	117	5	91	4	85	3	99	4	119	4
Total:	2,545	100%	2,474	100%	2,564	100%	2,922	100%	2,873	100%	2,895	100%

income of under \$35,000, 20 percent \$35,000 to \$49,999, 25 percent \$50,000 to \$79,999, and 25 percent \$80,000 or more.

Primary Commute Mode The lowest income group of commuters with incomes of under \$35,000 are least likely to drive alone (66%) and most likely to carpool (17%) or take a public bus (10%) to work. The highest income group of commuters with \$80,000 or more are most likely to drive alone (84%) and least likely to carpool (12%) to work.

One-Way Commute Distance There exists a positive correlation between household income and commute distance. Commuters with a household income of under \$35,000 travel an average one-way commute distance of 13 miles compared to 20 miles for commuters with a household income of \$80,000 or more.

Commute Time to and from Work The average daily commute time is the shortest for commuters with a household income of \$35,000-\$49,999 (61

minutes) and the longest for commuters with a household income of \$80,000 or more (79 minutes).

Full-time and Part-time Ridesharers The lowest income group of commuters with under \$35,000 are much more likely to be full-time ridesharers than the other three income groups (34% vs. 15-18%). However, the share of part-time ridesharers is similar across income groups (3-9%).

Ridesharing Alternatives for Commuters Who Always Drive-Alone The always drive-alone commuters with a household income of under \$35,000 are more likely to consider carpooling (37% vs. 29-33%), vanpooling (37% vs. 15-32%), taking a bus (23% vs. 9-12%), or riding a train (20% vs. 14-17%) to work one or more days a week than their counterparts in the other three income groups. However, the always drive-alone commuters in the highest income group are more likely to consider biking (21% vs. 13-18%) or walking (34% vs. 6-18%) to work one or two days a week than those in the other three income groups.

TABLE 3.4

ANNUAL HOUSEHOLD INCOME DISTRIBUTION												
	1992		1993		1994		1996		1998		1999	
Income	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Under \$20,000	240	12%	227	10%	258	12%	252	9%	359	15%	326	13%
\$20,000 to \$34,999	424	21	454	20	439	20	593	22	496	20	460	18
\$35,000 to \$49,999	455	23	502	23	513	24	644	23	457	19	523	20
\$50,000 to \$64,999	321	16	350	16	335	15	433	16	387	16	365	14
\$65,000 to \$79,999	222	11	259	12	223	10	264	10	233	10	294	11
\$80,000 to \$99,999	162	8	183	8	176	8	243	9	206	8	245	9
\$100,000 and over	173	9	239	11	249	11	308	11	298	12	403	15
Total:	1,997	100%	2,214	100%	2,193	100%	2,737	100%	2,436	100%	2,614	100%

Note: Based on face value and does not adjust for inflation.

Freeway Usage The higher the household income, the more likely the commuter uses the freeway to travel to work, ranging from 52 percent for commuters with a household income of under \$35,000 to 72 percent for commuters with a household income of \$80,000 or more.

Make Stop(s) on Way to Work or Home In general, the lowest income group of commuters with under \$35,000 are less likely to make stop(s) to (18% vs. 19-23%) or from (20% vs. 20-25%) work than the other three income groups.

Availability of Vehicle to Work The lowest income group of commuters with under \$35,000 are much less likely to always have a vehicle available to travel to work (75% vs. 94-97%) and much more likely to never have a vehicle available to travel to work (14% vs. 0.6-0.9%) than the other three income groups.

Change Work or Home Location due to Commute Distance The highest income group of commuters with \$80,000 or more are less likely to cite commute distance as a factor for changing work location (6% vs. 12-18%) than the other three income groups.

3.5 TRAVEL BEHAVIOR BY ETHNICITY

Ethnic Distribution With regard to ethnicity, respondents identified themselves as being in the categories as listed in Table 3.5. Overall, the ethnic distribution is consistent to what was reported in 1998. However, over the years, representation in the survey by Hispanics has increased significantly while representation by Whites (non-Hispanics) has declined significantly.

Only four of the six ethnic groups have a substantial number of respondents that allow for meaningful breakdown analysis. The four major ethnic groups and their percentages of the commuter population are: White, non-Hispanic (46%), Hispanic (37%), Asian (9%), and African-American (6%).

Primary Commute Mode White (non-Hispanic) and Asian commuters are more likely to drive alone to work (both 85%) than African-American and Hispanic commuters (69-70%). African-American and Hispanic commuters (both 18%) are more likely to carpool to work than White (non-Hispanic) and Asian commuters (12% and 8% respectively). Hispanic (8%) and African-American (7%) commuters are also much more likely to commute by bus than White (non-Hispanic) and Asian commuters (2% and 4% respectively).

TABLE 3.5

Group	ETHNIC GROUP											
	1992		1993		1994		1996		1998		1999	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
White, not Hispanic	1,427	59%	1,434	57%	1,436	56%	1,621	56%	1,378	49%	1,320	46%
African-American	127	5	192	8	224	9	207	7	166	6	166	6
Hispanic	628	26	585	23	632	24	750	26	1,013	36	1,038	36
Asian	179	8	219	9	223	9	245	9	236	8	258	9
American-Indian	31	1	31	1	22	1	33	1	30	1	50	2
Other	22	1	57	2	18	1	35	1	3	0	12	0
Total:	2,414	100%	2,518	100%	2,555	100%	2,891	100%	2,826	100%	2,844	100%

One-Way Commute Distance On average, the one-way commute distance is the longest for White (non-Hispanic) commuters (18 miles) and the shortest for Hispanic commuters (14 miles).

Commute Time to and from Work Likely a result of the shortest commute distance, Hispanic commuters spend the least time commuting each day (69 minutes). Despite the longest commute distance, White (non-Hispanic) commuters spend less time (71 minutes) commuting each day than Asian (83 minutes) and African-American (84 minutes) commuters.

Full-time and Part-time Ridesharing Hispanic and African-American commuters are much more likely to be full-time (three or more days a week) ridesharers (both 31%) than their White (non-Hispanic) and Asian counterparts (both 15%). About eight percent of Asian commuters rideshare part-time (one or two days a week) to work, compared to six percent of Hispanic, five percent of White, not Hispanic, and two percent of African-American commuters.

Ridesharing Alternatives for Commuters Who Always Drive-Alone Hispanic drive-alone commuters are most likely to consider commuting by carpool one or two days a week (37%), followed by African-American (35%), White (non-Hispanic) (31%), and Asian (25%) drive-alone commuters. White (non-Hispanic) (9%) and Asian (8%) drive alone commuters are less likely to consider commuting by bus one or two days a week than the other two ethnic groups (14-21%). Asian drive-alone commuters (11%) are also less likely to consider commuting by train one or two days a week than the other three ethnic groups (16-18%).

Freeway Usage Asian commuters are more likely to travel on a freeway during their commute to work than the other three ethnic groups (72% vs. 58-67%).

Make Stop(s) on Way to Work or Home Asian commuters (16%) are less likely to make a stop on the way to work than the other three ethnic groups (all 21%). With regard to the trip home, African-American (34%) and White (not of Hispanic origin) (27%) commuters are more likely to make a stop than Asian and Hispanic commuters (16% and 18% respectively).

Availability of Vehicle to Work Hispanic (9.8%) and African-American (6.1%) commuters are more likely to report that they never have a vehicle available to travel to work than White, non-Hispanic (1.3%) and Asian commuters (4.3%).

Change Work or Home Location due to Commute Distance African-American commuters are the most likely to change either their work (22%) or home (17%) locations because of commute distance while Asian commuters are the least likely (9.2% and 8.2% respectively).

3.6 TRAVEL BEHAVIOR BY EMPLOYER SITE SIZE

Distribution of Employer Site Size With respect to employer size, 62 percent of the respondents report working at sites with fewer than 100 employees (37% work at sites with fewer than 25 employees and 25% work at sites with 25 to 99 employees) and 38 percent report working at sites with 100 or more employees (14% work at sites with 100-249 employees, 24% work at sites with 250 or more employees). In 1998, 64 percent of the respondents reported working at sites with fewer than 100 employees and 36 percent reported working at sites with 100 or more employees.

Primary Commute Mode The drive-alone share is similar across the four employer site size categories (76-80%). The carpool share is the highest at sites with 25-99 employees (17%), followed by sites with 250 or more employees (15%), sites with 100-249 employees (13%), and is the lowest at the smallest sites with less than 25 employees (11%).

One-Way Commute Distance There is a weak positive correlation between one-way commute distance and site size, ranging from 14.3 miles at sites with 25 or fewer employees to 18.9 miles at sites with 250 or more employees.

Commute Time to and from Work Maybe due to their longer commute distance, commuters at the larger sites with 250 or more employees spend more time commuting each day (76 minutes) than their counterparts at smaller sites (69-75 minutes).

Full-time and Part-time Ridesharers The share of full-time (20-24%) and part-time (4-7%) ridesharers is similar across all site sizes.

Ridesharing Alternatives for Commuters Who Always Drive-Alone Commuters who always drive alone at the regulated (250 or more employees) and deregulated (100-249 employees) sites are the most likely to consider commuting by carpool (both 43%) one or two days a week than drive-alone commuters at the other two site size categories (28-31%). Commuters who always drive alone at the deregulated sites with 100-249 employees are the most likely to consider commuting by vanpool one or two days a week than those at the other three site size categories (49% vs. 20-28%).

Availability of Vehicle to Work The larger the site, the more likely the commuters report to have a vehicle always available to work (from 86% at the smallest sites with less than 25 employees to 95% at the largest sites with 250 or more employees); and the less likely the commuters report to never have a vehicle available to work (from 5.4% at the smallest sites to 2.5% at the largest sites).

3.7 ADDITIONAL DEMOGRAPHIC CHARACTERISTICS

Occupation Collecting information on occupation is difficult because people tend to classify the same kind of job differently. Also, with the multitude of job titles, it is difficult, if not impossible, to make objective direct comparisons. With that caveat, the most frequently cited occupational category is sales/services (27%). Significantly, it represents the

first time that sales/services surpassed professional as the number one occupation. A breakdown of survey responses for occupation is shown in Table 3.6.

Middle managers (84%), professional workers (84%), and senior managers (81%) are the most likely to drive alone to work while production/crafts (69%) and construction (71%) workers are the least likely.

Construction workers and middle managers travel the longest distances to work (22.4 miles and 18.6 miles respectively) while maintenance and secretarial workers travel the shortest distances (12.8 miles and 13.2 miles respectively). As a result of the longest trip distance, construction workers spend much more time commuting each day than workers in the other occupations (98 minutes vs. 54-82 minutes).

Industry The top three industries reported by the most respondents are service/entertainment (21%), public administration/government (16%), and manufacturing/production (14%). Like occupation, it is also difficult to collect information on industry type because many companies, large companies in particular, have a variety of businesses that overlap industry categories. As a result, it is also very difficult to make direct comparisons among industries.

By industry type, workers in construction and service/entertainment industries are the least likely to

TABLE 3.6

OCCUPATION												
Occupation	1992		1993		1994		1996		1998		1999	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Secretarial/ Clerical	379	16%	429	17%	362	14%	381	13%	320	11%	308	11%
Production	302	13	289	11	235	9	246	8	275	10	292	10
Senior Mgt.	129	5	147	6	142	5	152	5	139	5	117	4
Middle Mgt.	232	10	267	10	275	11	352	12	313	11	293	10
Maintenance	174	7	156	6	142	6	176	6	170	6	181	6
Sales/Service	476	20	504	20	500	19	565	19	648	22	782	27
Professional	559	24	613	24	668	26	748	26	803	28	709	25
Construction	100	4	130	5	153	6	155	5	155	5	173	6
Other	11	1	26	1	108	4	132	5	45	2	29	1
Total:	2,362	100%	2,561	100%	2,585	100%	2,904	100%	2,867	100%	2,884	100%

drive alone to work on a regular basis (both 74%) while wholesale trade and aerospace workers (91% and 87% respectively) are the most likely to drive alone to work

Employees at sites in construction travel the longest distances to work (22 miles), followed by employees in aerospace (18 miles) and healthcare (17 miles); employees at sites in retail trade travel the shortest distances (14 miles), followed by employees in manufacturing/production and public administration/government agencies (both 15 miles).

Length of Stay at Work Site and Home Residence

Area commuters report working at their current work location an average of 5.5 years. The average was 5.9 years in 1998 and 5.7 in 1996.

Twenty percent report working at the same location 10 years or more, in line with what was reported in 1998 (22%) and 1996 (20%) but significantly higher than the 14% reported in 1994. Respondents who have worked at their current location two years or less (43%) were asked what influenced their decision to change work locations. Commute-related issues were addressed by 22 percent of these individuals as a reason for their change in work location, lower than the 26 percent reported in 1998 but still much higher than the 16 percent reported in 1996. Thirteen percent report that commute distance influenced their decision to change work locations and three percent each cite the cost of the commute, traffic congestion, and the stress of the commute as a reason for a change in work location.

With regard to the length of stay at their home address, respondents were quite varied in their responses. The average stay at their home address was 7.6 years, slightly lower than the 8.4 years reported in 1998. Thirty-one percent report a length of stay of 10 years or more at the same location. Respondents who have lived at their current location two years or less (31%) were asked what influenced their decision to change home location. Commute-related issues were addressed by 17 percent of these individuals as a reason for the move. This figure was 28 percent in 1998, 17 percent in 1996, 15 percent in 1994, and 23 percent in 1993. Twelve percent claim their commute distance influenced their decision to move.

Three percent cite commute-related costs, two percent refer to commute stress, and one percent cite traffic congestion as the motivating factor in their decision to change home location. Sixteen percent cite a job change as the motivating factor in their decision to change home location within the last two years.

Annual Personal Income¹⁵ According to the 1998 survey, over one-quarter of commuters (29%) reported an annual personal income of under \$20,000, less than one third (30%) \$20,000 to \$34,999, about one-fifth (19%) \$35,000 to \$49,999, and about one-quarter \$50,000 or more (23%).

Marital Status¹⁶ According to the 1998 survey, more than half of commuters (56%) were married, one-third (34%) were single, eight percent were divorced and one percent were widowed.

Number of Working Days in a Week Over three-quarters of commuters (77%) work five days a week, 11 percent six or seven days a week, and eight percent two to four days a week.

Number of Jobs¹⁷ According to the 1998 survey, fourteen percent of the commuters held more than one job.

Number of Household Motor Vehicles Owned or Leased¹⁸ According to the 1998 survey, over one-third (38%) reported three or more motor vehicles in the household, nearly four in ten commuters (39%) reported two motor vehicles, about one-quarter (22%) cited one motor vehicle, while 1.4 percent reported no motor vehicles in their household.

Availability of a Vehicle to Work Nearly nine out of ten commuters (89%) report that a vehicle is always available for going to work, six percent report a vehicle is sometimes available while the remaining five percent report that a vehicle is never available.

Availability of a Bus to Work More than four in ten commuters¹⁹ (43%) are aware that there is a bus that they could take to get to work. Half of area commuters (50%) report that there is no such bus while the remaining seven percent do not know whether a bus is available.

¹⁵ The question was not asked in the 1999 survey.

¹⁶ The question was not asked in the 1999 survey.

¹⁷ The question was not asked in the 1999 survey.

¹⁸ The question was not asked in the 1999 survey.

¹⁹ Including commuters who are riding a bus to work.

4 Employer Transportation Programs

4.1 INTRODUCTION

An additional objective of this study is to determine commuters' awareness and usage of employer transportation programs at their work sites. Whether in a regulated or unregulated environment, employers have long been considered by many transportation professionals to be the key to successful transportation demand management strategies given that they can implement, promote, market, and monitor various transportation programs at their work site and can reach a large segment of the commuting population with a shared trip destination.

4.2 AWARENESS, PARTICIPATION, AND INFLUENCE OF EMPLOYER PROGRAMS

Respondents to the survey were asked what their employer does to encourage employees to rideshare. Specific programs were mentioned and respondents were asked whether they were aware that their employer offered such a program. Responses to this question can be found in Table 4.1.

Beginning in 1992 and continuing through 1996, employees were far more aware of transportation programs than they had been in previous years. However, this up trend was reversed in 1998 and the decline continued in 1999: the level of awareness of the vast majority of the 16 transportation programs listed in Table 4.1 dropped again from 1998 to 1999. However, the magnitude of the decline in program awareness from 1998 to 1999 is smaller than that from 1996 to 1998. The most dramatic decreases over the last three years occurred in programs directly related to ridesharing assistance. This significant decline in awareness of transportation programs is likely to be a result of (1) weakened regional marketing efforts due to substantial cuts in funding to the regional rideshare programs and (2) elimination or scaling-down of transportation programs by employers, particularly the deregulated employers, in response to recent air quality deregulation.

Twenty-five percent of all respondents report that their employer offers no transportation incentives

(listed in Table 4.1) to encourage usage of alternative travel modes, higher than the 22 percent reported in 1998 and 18 percent in 1996.

Employees at sites with 100 or more employees were much more likely to say that their employer offered at least one transportation program (85%) than those at sites with fewer than 100 employees (69%). Both figures are similar to those from 1998 (87% and 69% respectively). Employees at regulated sites with 250 or more employees were even more likely to say that their employers offered at least one transportation program (89%), about the same as reported in 1998 (90%).

As can be seen in Table 4.2, awareness of specific employer transportation programs continues to be much greater among employees at large work sites with 100 or more employees than among employees at small sites. This disparity between the large and small firms is not surprising given the fact that sites with 100 or more employees in Los Angeles, Orange, Riverside, and San Bernardino Counties, and sites with 50 or more employees in Ventura County, were mandated (from the late 1980s to 1995) by their local air districts to develop trip reduction programs which would reduce the number of single occupant vehicles arriving at the work site during the morning peak period. Furthermore, regional rideshare agencies devote most of their resources and marketing activities at sites with 100 or more employees. Larger employers are more likely to devote a greater amount of financial and staffing resources toward transportation programs.

However, compared to 1998, there is a further drop in awareness of employer transportation programs across all employer site sizes, particularly, at sites with 100 or more employees. At these larger sites, programs that suffered the worst decline in terms of employee awareness include "subsidizes ridesharing" (17% in 1999 vs. 22% in 1998), "has contests/prizes for ridesharers" (21% vs. 27%), "guarantees a ride home in case of an emergency" (37% vs. 44%), "provides preferred parking spaces to ridesharers" (45% vs. 51%), "assists in forming carpools or van-

TABLE 4.1

AWARENESS BY EMPLOYEES OF EMPLOYER TRANSPORTATION PROGRAMS						
Employer Program	1992	1993	1994	1996	1998	1999
Offers Flexible Work Hours	42%	41%	42%	49%	48%	47%
Guarantees A Ride Home In Case Of An Emergency	34	39	40	42	38	34
Provides Ridesharing Info	33	35	37	42	32	31
Assists In Forming Carpools And Vanpools	31	32	36	38	28	27
Provides Preferred Parking Spaces To Ridesharers	25	25	29	28	25	23
Offers 4/40 Work Schedule	15	20	20	18	18	18
Provides Bus/Rail Information On Routes And Schedules	19	20	20	20	16	14
Registers Employees With Rideshare Agency	18	16	19	22	14	12
Provides Free/Low Cost Parking To Ridesharers	16	8	9	13	13	11
Has Contests/Prizes For Ridesharers	14	17	21	21	12	10
Offers 9/80 Work Schedule	11	12	11	10	10	9
Offers 3/36 Work Schedule	8	6	6	6	5	5
Subsidizes Ridesharing	15	19	20	15	10	8
Sells Bus/Rail Passes	10	9	10	10	8	6
Offers A Company Car During The Day To Those Who Rideshare	8	9	10	9	9	8
Gives Each Employee A Monthly Allotment Of Money To Reduce Commuting Costs	12	10	10	5	6	6

pools” (50% vs. 55%), and “provides ridesharing information” (58% vs. 63%) (see Table 4.2).

The awareness of employer transportation program has been declining steadily at deregulated sites with 100-249 employees since 1994 (78.4% in 1999, 82.5% in 1998, 83.7% in 1996, and 85.5% in 1994).

Despite the higher awareness of transportation programs at the larger employer sites with 100 or more employees, the usage of transportation alternatives is similar between employees at these larger employer sites and their counterparts at smaller employer sites (27% of the employees at the larger sites are ridesharers vs. 24% at the smaller sites). Commuters at regulated sites with more than 250 employees are as likely to drive alone to work on a regular basis as

TABLE 4.2

AWARENESS BY EMPLOYEES OF EMPLOYER TRANSPORTATION PROGRAMS BY EMPLOYER SIZE

	Number of Employees at the Work Site								
	Less than 25			25-99			100+		
	1996	1998	1999	1996	1998	1999	1996	1998	1999
Offers Flexible Work Hours	56%	50%	47%	41%	44%	41%	49%	47%	49%
Offers 4/40 Work Schedule	20	15	16	17	12	12	22	23	22
Offers 9/80 Work Schedule	7	8	6	7	7	6	16	14	13
Offers 3/36 Work Schedule	6	5	7	4	2	4	8	7	4
Assists In Forming Carpools And Vanpools	14	10	10	26	16	19	71	55	50
Provides Ridesharing Info	16	11	8	30	20	23	77	63	58
Guarantees A Ride Home In Case Of An Emergency	37	36	31	37	32	36	52	44	37
Provides Preferred Parking Spaces To Ridesharers	9	10	7	17	12	14	56	51	45
Registers Employees With Rideshare Agency	3	4	2	15	7	6	51	32	28
Provides Bus/Rail Information On Routes And Schedules	6	5	3	12	8	7	43	32	29
Provides Free/Low Cost Parking To Ridesharers	6	7	4	9	8	6	22	23	20
Subsidizes Ridesharing	2	3	2	8	4	4	36	22	17
Sells Bus/Rail Passes	2	2	1	8	6	4	21	15	14
Offers A Company Car During The Day To Those Who Rideshare	6	7	7	7	7	5	12	13	10
Has Contests/Prizes For Ridesharers	4	3	2	13	5	4	47	27	21
Gives Each Employee A Monthly Allotment Of Money To Reduce Commuting Costs	3	4	1	2	4	4	9	10	10

commuters at unregulated sites with fewer than 250 employees (80% vs. 79%).

commuters who work at sites with 100 or more employees are slightly less likely to always rideshare (16% vs. 19%) and are somewhat more likely to always drive alone (67% vs. 65%) than employees at sites with fewer than 100 employees (see Table 4.3).

A new question was introduced in 1991 regarding program participation. Respondents who claimed their employer offered various transportation pro-

grams at the work site were also asked whether they had used the program. Program participation rates range from 12 to 75 percent with a median program participation rate of 30 percent. Two-thirds (67%) of the respondents who were aware of a transportation program actually participated in at least one program. The top three programs which generated the highest participation rates include: flexible work hours (75%), ridesharing subsidies (46%), and monthly allotment of money to reduce commuting costs (46%). The bottom two programs which triggered the lowest participation rates include: 3/36

¹Base: Programs that at least 200 respondents are aware of.

work schedule and 4/40 work schedules (both 12%). A breakdown of participation rates for all transportation programs can be found in Table 4.4.

Commuters at sites with fewer than 100 employees are almost as likely as commuters at sites with 100 or more employees to participate in transportation programs (66% vs. 68%). However, commuters at regulated sites with 250 or more employees are more likely than commuters at smaller employer sites (70% vs. 65%) to participate in transportation program. At sites with 100 or more employees, Programs¹ with the highest participation rates include: flexible work hours (74%), registration with a rideshare agency (46%), contests with prizes for ridesharers (41%), free or low cost parking for ridesharers (35%), bus and rail routes and schedule info (29%), ridesharing information (26%), and preferred parking spaces (26%). Programs which at least 200 respondents are aware of and trigger the highest participation rates at sites with fewer than 100 employees in order of significance include: flexible work hours (76%), assistance in forming a carpool or vanpool (27%), ridesharing information (27%), and guaranteed ride home (25%). Employees at larger employer sites with 100 or more employees are less likely to use financial incentives (45% vs. 54%) but are slightly more likely to use

non-financial incentives (68% vs. 65%) than their counterparts at smaller employer sites.

The program participation rate has been declining steadily at deregulated sites with 100-249 employees since 1996 (63.3% in 1999, 69.3% in 1998, 74.3% in 1996, and 72.2% in 1994).

Beginning in 1992, a new question was asked regarding program influence on travel mode choice. Of respondents who participated in a program, 10 to 32 percent believe the program influenced their choice of travel mode with a median influence rate of 15 percent. The most influential programs include: monthly allotment of money to reduce commuting costs (32%), ridesharing subsidies (30%), free/low cost parking to ridesharers (21%), bus and rail information on routes and schedules (18%), contests/prizes for ridesharers (18%), guaranteed ride home (15%), carpool and vanpool formation assistance (15%), and ridesharing information (15%).

4.3 TELECOMMUTING

Less than 10 percent (8.6%) of all respondents to the 1999 survey report that they have an opportunity to work at home instead of going to their regular place of work. It is slightly lower than the 8.8 percent

TABLE 4.3

RIDESHARING PARTICIPATION AND FREQUENCY BY EMPLOYER SIZE												
	Number of Employees at the Work Site											
	Less than 25				25-99				100+			
	1998		1999		1998		1999		1998		1999	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Always drive alone	707	67%	700	65%	499	65%	468	65%	633	62%	740	67%
Drive alone + trip reduction option (telecommuting or compressed work week)	101	10	100	9	43	6	36	5	113	11	95	9
Drive alone + mixed ridesharing*	60	6	77	7	72	9	75	10	111	11	85	8
Always rideshare*	185	18	195	18	154	20	145	20	171	17	181	16
Base:	1,053	100%	1,072	100%	768	100%	724	100%	1,028	100%	1,101	100%

* Includes those on compressed work weeks or telecommuting.

reported in 1998 and 9.2 percent in 1996, down significantly from the 12.5 percent reported in 1994. More than eight out of ten (82%) of those with the opportunity to telecommute actually do, and they telecommute an average of 3.2 days a month. Such a high participation rate makes telecommuting the most popular program an employer can offer to employees, yet it is one of the least offered programs by employers.

Not everyone has the same opportunity to telecommute. For example, 15 percent of senior managers, 11 percent of professional workers, 10 percent of middle managers and sales/services workers say they have the opportunity to telecommute as opposed to two percent of maintenance workers, four percent of production/crafts, and five percent of secretarial/clerical workers. Men are more likely to have the opportunity to telecommute than women (10% vs. 7%). Employees within the transportation, communication, electric, gas & sanitary services industry have

the greatest opportunity to telecommute (13%) while those in retail trade have the least opportunity (2%). Commuters with an annual household income of less than \$65,000 are less likely to have the opportunity to telecommute than their counterparts with a higher household income (6% vs. 14%).

Eleven percent of workers at sites with fewer than 25 employees have the opportunity to telecommute, whereas six percent of workers at sites with 25-99 employees and eight percent of workers at sites with 100 or more employees have such an opportunity.

4.4 ALTERNATIVE WORK SCHEDULES

Awareness of alternative work schedules at the work site remains consistent with findings from 1998. A breakdown of work schedules by year is illustrated in Table 4.6.

Five percent of survey respondents state that they are currently on either a 4/40, 9/80 or 3/36 work sched-

TABLE 4.4

PARTICIPATION IN EMPLOYER TRANSPORTATION PROGRAMS					
Employer Program	1993	1994	1996	1998	1999
Flexible Work Hours	68%	68%	72%	73%	75%
4/40 Work Schedule	53	42	15	11	12
9/80 Work Schedule	43	35	26	32	29
3/36 Work Schedule	34	43	11	10	12
Carpool And Vanpool Formation Assistance	27	26	29	27	24
Ridesharing Information	24	25	30	28	27
Preferential Parking Spaces To Ridesharers	29	29	34	26	25
Registration With a Rideshare Agency	22	27	49	33	40
Bus/Rail Information On Routes And Schedules	17	17	20	22	31
Free/Low Cost Parking To Ridesharers	32	38	34	32	39
Ridesharing Subsidies	33	35	34	27	46
Bus/Rail Pass Sales	19	7	20	18	28
Contests/Prizes For Ridesharers	35	32	36	29	39
Monthly Allotment Of Money To Reduce Commuting Costs	41	41	46	53	46

ule. This is virtually the same as reported in 1998 and 1996 (both 6%) but represents a significant decline in alternative work schedule participation compared to the 13 percent reported in 1994. About two percent each work a 4/40 schedule (2.1%) and a 9/80 schedule (2.4%) and less than one percent work a 3/36 schedule (0.6%). Employees at sites with 100 or more employees are more likely to be aware of (29% vs. 7%) and use (18% vs. 3%) alternative work schedules at their site than those at sites with fewer than 100 employees.

4.5 1-800-COMMUTE TELEPHONE INFORMATION

Nearly one-third (33%) of area commuters have heard of the 1-800-COMMUTE telephone information number. This continues the steady decline from the 36 percent reported in 1998, 42 percent in 1996, and 61 percent in 1994. Men are less likely to be aware of the number than women (30% vs. 36%). Recognition of the 1-800-COMMUTE

number is higher among those at regulated sites with 250 or more employees than those at sites with fewer than 250 employees (40% vs. 31%). Workers in wholesale trade and aerospace are the most aware of the number (57% and 45% respectively) while those in manufacturing/ production and construction are the least aware (both 22%). Freeway users are more likely to be aware of the number than non-freeway users (35% vs. 30%).

Three percent of area commuters report that they have contacted the 1-800-COMMUTE number for commute-related information. Of those who contacted the number, 39 percent were interested in carpooling and vanpooling information, 22 percent called to receive Metrolink information, 18 percent were interested in bus/rail information, nine percent were investigating freeway conditions, and two percent were interested in information on telecommuting. Users of the 1-800-COMMUTE number gave the service an average rating of 5.6 with a median of

TABLE 4.5

INFLUENCE OF PROGRAM ON COMMUTE MODE CHOICE					
Employer Program	Influenced Commute Mode Choice				
	1993	1994	1996	1998	1999
Company Car During The Day To Those Who Rideshare	15%	25%	9%	33%	13%
Guaranteed Ride Home	28	27	17	24	15
Ridesharing Subsidy	21	23	19	13	30
Preferential Parking Spaces To Ridesharers	15	18	16	12	13
Monthly Allotment Of Money To Reduce Commuting Costs	21	29	18	40	32
Carpool And Vanpool Formation Assistance	17	17	18	17	15
Ridesharing Information	11	14	19	16	15
Free/Low Cost Parking To Ridesharers	17	24	18	14	21
Bus/Rail Information On Routes And Schedules	8	8	11	16	18
Registration With a Rideshare Agency	6	13	12	7	14
Contests/Prizes For Ridesharers	17	19	13	9	18
Bus/Rail Pass Sales	6	6	14	13	10

7.0, on a one to nine scale, where one is low and nine is high.

Additional findings on recognition of the 1-800-COMMUTE number by ethnicity, by freeway usage and home county can be found in Tables 4.7-4.9.

4.6 RIDEGUIDE

Six percent of area commuters report that they have received a RideGuide within the past 12 months. This figure is the same as reported in 1998 but is sig-

nificantly lower than the 10 percent reported in 1996. (A RideGuide is a personalized commute planner highlighting all available travel options for a particular individual. RideGuides contain specific information on carpooling, vanpooling, bus, rail, park and ride lots, and HOV facilities.) Of those who received a RideGuide, more than three-quarters (76%) were most interested in the information on carpooling, 22 percent in transit/bus, 13 percent were interested in vanpooling, 11 percent in rail, and four percent each in HOV lane and park and ride lot information. Compared to the 1998 survey, com-

TABLE 4.6

AWARENESS OF ALTERNATIVE WORK SCHEDULES AT WORK SITE												
Employer Offers:	1992		1993		1994		1996		1998		1999	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
4/40 Work Schedule	375	15%	515	20%	522	20%	570	20%	510	18 %	504	18%
9/80 Work Schedule	262	11	297	12	276	11	294	10%	297	10	246	9
3/36 Work Schedule	190	8	152	6	162	6	173	6%	150	5	146	5

TABLE 4.7

RECOGNITION OF THE 1-800-COMMUTE NUMBER BY ETHNIC GROUP				
Recognition of:	White	African-American	Hispanic	Asian
1-800-COMMUTE	35%	45%	26%	36%

TABLE 4.8

FREEWAY USERS RECOGNITION OF THE 1-800-COMMUTE NUMBER						
Home County						
Recognition of:	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial*
1-800-COMMUTE	37%	29%	30%	40%	34%	17%

*Only six cases in Imperial County.

TABLE 4.9

NON-FREEWAY USERS' RECOGNITION OF THE 1-800-COMMUTE NUMBER						
Home County						
Recognition of:	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial*
1-800-COMMUTE	33%	24%	22%	29%	23%	10`%

*Only ten cases in Imperial County.

muters are much more interested in bus information (22% vs. 9%). Those who received a RideGuide gave it an average satisfaction rating of 5.8 with a median of 6.0, on a one to nine scale, where one is low and nine is high.

Those at regulated work sites with 250 or more employees are far more likely to receive a RideGuide than those at sites with fewer than 250 employees (12% vs. 4%). The more employees at the work site, the more likely an individual has received a RideGuide, ranging from less than one percent at the smallest sites with less than 25 employees to 13 percent at the largest sites with 500 or more employees.

Women were slightly more likely than men to receive a RideGuide (7% vs. 5%). By ethnic group, African-Americans and White (non-Hispanic) (9% and 7% respectively) were more likely to receive a RideGuide than Hispanics and Asians (both 3%). Commuters in the finance, banks, insurance or real estate (13%), aerospace (12%), and health care industries (12%) are the most likely to receive a RideGuide while commuters in the construction and retail trade industries are the least likely (both 1%).

Where a commuter lives had only a marginal impact on the likelihood of whether they received a RideGuide. Those who live in San Bernardino County were slightly more likely (8%) to have received a RideGuide than those who live in Riverside (7%), Ventura (6%), Los Angeles and Orange Counties (both 5%).

Commuters who use a freeway to travel to work were about equally likely to have received a RideGuide than those who only travel on surface streets (6% vs. 5%). With regard to primary travel mode, eight percent of carpoolers received a RideGuide within the past 12 months as opposed to five percent of drive-alone commuters.

5 Commuter Attitudes

5.1 INTRODUCTION

As in years past, respondents to the 1999 survey were asked a variety of attitudinal questions to learn about their perception of traffic conditions, commute satisfaction, experience with commute-related stress, factors influencing travel mode choice, attitudes toward and use of high occupancy vehicle (HOV) or carpool lanes, and awareness of regional rideshare advertising campaigns. Beginning in 1994, some new questions were added to learn about commuters' perceptions about the cost of their commute.

5.2 ATTITUDES TOWARD THE COMMUTE

Since 1991, respondents have been asked to rate traffic on the freeways and surface streets they use to travel to work and to compare current conditions to what traffic was like one year ago. Tables 5.1 and

5.2 compare 1999 ratings to ratings from previous years. All commuters were eligible to rate street traffic, but only the 1,785 commuters (61%) who indicated in a previous question that they use freeways were asked to evaluate freeway traffic.

As can be seen in Table 5.1, more respondents believe freeway traffic is "always bad" from 1996 through 1999: 19 percent of commuters believe traffic is "always bad" compared to 16 percent in 1998 and 13 percent in 1996. Accordingly, fewer respondents believe freeway traffic is "always good" during the same period. About 32 percent of respondents labeled their freeway traffic as "mixed," continuing to be the highest percentage of all ratings. One could interpret from this that it is difficult for many commuters to label their commute as more often good or bad and that it really fluctuates between the two from day to day.

TABLE 5.1

PERCEPTIONS OF FREEWAY TRAFFIC AMONG FREEWAY USERS						
Traffic Rating	1992	1993	1994	1996	1998	1999
Always Bad	19%	20%	18%	13%	16%	19%
More Often Bad	30	14	16	19	19	17
Mixed	8	19	16	31	29	32
More Often Good	27	25	24	21	21	20
Always Good	16	22	26	16	15	12

TABLE 5.2

PERCEPTIONS OF SURFACE STREET TRAFFIC AMONG ALL COMMUTERS						
Traffic Rating	1992	1993	1994	1996	1998	1999
Always Bad	11%	12%	11%	5%	6%	11%
More Often Bad	21	12	15	14	11	10
Mixed	7	17	16	33	38	39
More Often Good	33	27	21	28	27	24
Always Good	28	32	37	20	18	16

The same trend witnessed in assessing freeway traffic conditions can be applied to surface street traffic as well. In 1999, commuters were slightly more apt to consider their surface street traffic as “always bad” and slightly less as “always good.” The substantial decline in the percent of commuters rating surface street traffic as “always good” from 1994 to 1998 continues in 1999. As in past surveys, commuters continue to perceive street traffic as being considerably better than freeway traffic. This may be a reflection of less congestion on surface streets as well as shorter distances traveled on surface streets, whether for part or all of the commute to work. In addition, regional efforts to improve computerized signal synchronization may also have contributed to less congestion on many surface streets.

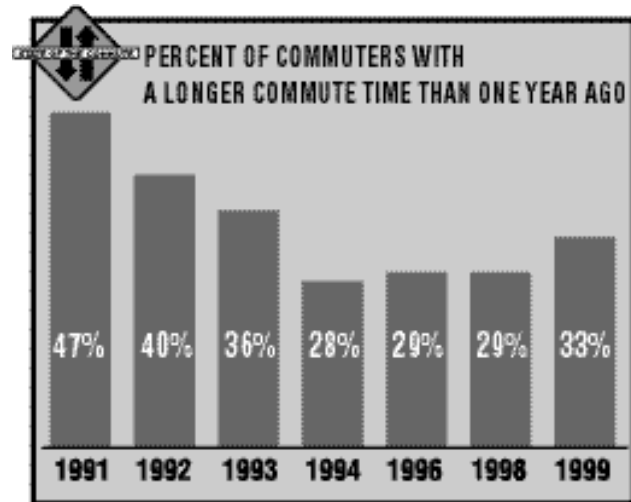
Respondents were also asked to compare current freeway traffic and surface street traffic to conditions of one year ago. Tables 5.3 and 5.4 show commuters’ assessments from 1992 to 1999.

Thirteen percent of commuters believe that traffic is better now than it was one year ago, the same as reported in 1998 after a dramatic and steady decrease from 1994 to 1998. However, more commuters believe that traffic is worse now than one year ago (43% vs. 39% in 1998). Forty-four percent of the respondents perceive freeway traffic to be about the same as a year ago.

A comparison of current surface street traffic to one year ago yielded similar results as the comparison of

freeway traffic. Commuters’ perception of current surface street traffic compared to one year ago remain very much the same as reported in 1998 after a tremendous decrease in the share of commuters believing surface street traffic was better now than a year ago, and a similar decrease in the share of commuters believing surface street traffic was worse than a year ago. More than half of commuters (57%) believe surface street traffic is the same as a year ago.

An additional question was asked beginning in 1991 regarding commute travel time compared to one year ago. More commuters report that their commute is longer now than a year ago (33% vs. 29%) (See the chart below):



It is not known to what extent employment rates in the region have affected traffic congestion during the peak hours, but it may be one factor contributing to

TABLE 5.3

COMPARISON OF CURRENT FREEWAY TRAFFIC TO ONE YEAR AGO						
Traffic Rating	1992	1993	1994	1996	1998	1999
Better Than Year Ago	12%	19%	31%	18%	13%	13%
Same As Year Ago	33	32	30	48	48	44
Worse Than Year Ago	55	49	39	34	39	43

TABLE 5.4

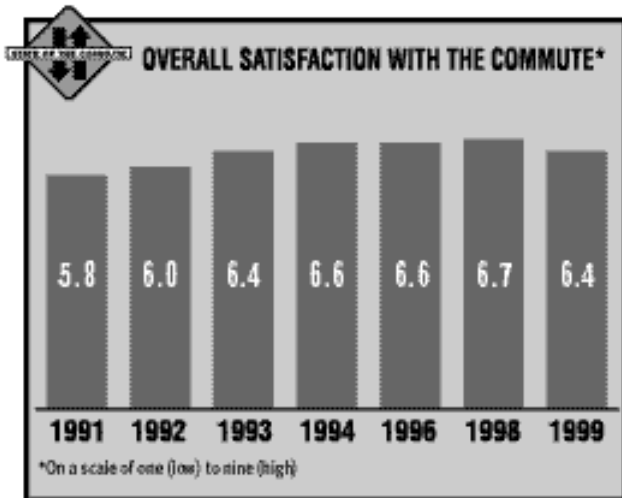
COMPARISON OF CURRENT SURFACE STREET TRAFFIC TO ONE YEAR AGO						
Traffic Rating	1992	1993	1994	1996	1998	1999
Better Than Year Ago	13%	18%	17%	10%	11%	10%
Same As Year Ago	41	40	48	62	59	57
Worse Than Year Ago	46	42	35	28	30	33

commuters' changing attitudes about the commute. According to statistics from the California Employment Development Department and the Southern California Association of Governments, the total number of workers living in the region in November 1990 was 6.9 million and declined steadily to 6.7 million in November 1993, a decline of 3 percent overall. Since then, however, the regional employment has grown steadily to 7.5 million by November 1998, an increase of 12 percent. The increase is the most dramatic in San Bernardino, Riverside (16%), followed by Orange (13%) and Los Angeles (12%) counties (See Table 5.5). (Note: Figures are reported for November prior to the study year to correspond to interview dates.)

5.3 OVERALL SATISFACTION WITH THE COMMUTE

Each year, since 1990, survey respondents have been asked to rate their overall satisfaction with their commute, using a scale of one to nine, where one represents the least dissatisfaction, and nine represents the most satisfaction. The average satisfaction rating reported by all commuters improved steadily from 1990 through 1998 but declined slightly from 1998 to 1999 (See the chart on top).

A little over one-third of all commuters (36%) rate their satisfaction level as either an eight or nine (lower than the 42 percent reported in 1998) while six percent give it the lowest ratings of either one or two (higher than the 4 percent reported in 1998).



By primary travel mode, those who bicycle or walk are the most satisfied with their commute. Those who vanpool or drive alone or carpool are the least satisfied (see Table 5.6).

Full-time ridesharers are slightly more satisfied (satisfaction level of 6.5) with their commutes than are full-time drive-alone commuters (6.3) or part-time ridesharers (6.1).

As Table 5.7 illustrates, there is a significant difference in satisfaction levels when trip distance is considered: in general, the shorter the commute distance, the more satisfied people are with their commute. Maybe due to the shorter commutes, women are slightly more satisfied with their commute than men (6.6 vs. 6.2).

TABLE 5.5

REGIONAL EMPLOYMENT							
County of Residence	Nov. 1990 (000)	Nov. 1991 (000)	Nov. 1992 (000)	Nov. 1993 (000)	Nov. 1995 (000)	Nov. 1997 (000)	Nov. 1998 (000)
Los Angeles	4,157	4,166	4,037	3,927	4,009	4,259	4,389
Orange	1,260	1,225	1,228	1,251	1,270	1,371	1,410
Ventura	343	338	341	343	351	358	368
San Bernardino/Riverside	1,122	1,117	1,154	1,138	1,194	1,281	1,323
Imperial	37	39	41	41	41	42	43
TOTAL:	6,919	6,884	6,801	6,699	6,866	7,311	7,532

*Source: California Employment Development Department/SCAG Employment Database. Based on a household survey.

¹Ratings that are based on a small number of respondents should be used with caution.

5.4 COMMUTER STRESS

Peak-hour traffic is often cited as having a negative impact on the quality of life in Southern California. In order to monitor the extent to which commuting adds stress to the lives of workers in the six-county region, a series of questions were added to the survey

beginning in 1993. Overall, results from these questions are very similar to those reported in 1998 (see Tables 5.8, 5.9, and 5.10).

When asked how often they feel bothered by traffic congestion in commuting to or from work, 29 per-

TABLE 5.6

COMMUTE SATISFACTION BY TRAVEL MODE		
	1 = Low Satisfaction	9 = High Satisfaction
Primary Travel Mode	Average Satisfaction Rating ¹	Number of Cases
Bicycle	7.9	15
Walk or Jog	7.6	28
Motorcycle	7.2	3
Rail	7.0	21
Bus	6.9	121
Carpool	6.5	400
Drive Alone	6.3	2,285
Vanpool	4.1	27

TABLE 5.7

COMMUTE SATISFACTION BY TRIP DISTANCE		
	1 = Low Satisfaction	9 High Satisfaction
Distance	Average Satisfaction Rating	Number of Cases
Less than 5 miles	7.3	616
5 to 9 miles	7.1	515
10 to 14 miles	6.4	486
15 to 19 miles	6.1	341
20 to 24 miles	5.9	282
25 to 29 miles	5.5	156
30 to 34 miles	5.2	135
35 to 44 miles	5.4	156
45 miles and over	5.0	186

TABLE 5.8

FREQUENCY OF FEELING BOTHERED BY TRAFFIC DURING COMMUTE					
	1993	1994	1996	1998	1999
Very Often	20%	18%	19%	17%	20%
Fairly Often	11	10	12	11	9
Sometimes	30	28	28	27	26
Hardly Ever	22	22	23	24	20
Never	17	22	18	21	25

cent of commuters report that they are fairly often or very often affected (see Table 5.8), about the same as reported in 1998 (28%).

By primary travel mode, those who drive alone to work are only slightly more bothered by traffic congestion than those who carpool. Being bothered by traffic is positively correlated with commute distance, and, to a lesser degree, with income. Women are just as likely as men to report being bothered by traffic. By ethnicity, Asians are the most bothered by traffic, Hispanics are the least bothered.

More than half of all commuters (56%) claim that they never need to wind down and relax before starting work after their journey to work, which is higher than the 48 percent reported in 1998 (see Table 5.9). Commuters with travel distances of 15 miles or more one-way are much more likely than commuters with shorter travel distances to report having a need to wind down after their trip (20% vs. 10%).

One in ten commuters report that dealing with traffic on their commute home from work often has a negative effect on their home life, consistent with findings with previous surveys (see Table 5.10). Nearly one in five commuters who travel 45 miles or more one-way (19%) report that their commute home from work often has a negative effect on their home life.

5.5 COMMUTER CONCERNS

Respondents were asked which factors they consider when choosing their means of transportation to work. The eight most frequently mentioned factors are:

- ◆ convenience/flexibility (28%)
- ◆ travel time (14%)
- ◆ having no other way to get to work (9%)
- ◆ having a vehicle at work (9%)
- ◆ work hours/schedule (9%)
- ◆ comfort/relaxation (9%)
- ◆ reliability/dependability (8%)
- ◆ commuting costs (8%)

To better understand what is meant by “convenience/flexibility,” a new question was added in 1993 asking respondents to provide their own definition of the term. The top four responses based on the share of commuters first citing convenience or flexibility as a factor in choosing their travel modes are as follows:

- ◆ the ability to come and go as I please (49%)
- ◆ don’t have to plan/coordinate with others (19%)

TABLE 5.9

FREQUENCY OF NEED TO WIND DOWN AFTER TRIP TO WORK					
	1993	1994	1996	1998	1999
Very Often	10%	11%	8%	11%	8%
Fairly Often	5	5	5	4	6
Sometimes	15	15	16	15	14
Hardly Ever	24	19	21	22	16
Never	46	50	50	48	56

TABLE 5.10

DEGREE COMMUTE HOME HAS NEGATIVE EFFECT ON HOME LIFE					
	1993	1994	1996	1998	1999
Very Much	4%	3%	3%	3%	4%
Quite A Bit	5	6	6	5	6
Somewhat	12	11	9	10	10
A Little	20	19	22	25	15
Not At All	59	61	60	57	63

- ◆ reliable and dependable (10%)
- ◆ allows me to change plans, add stops, as I please (9%)

Commuting costs continue to lack major importance as a motivating factor, even though ridesharers most frequently cite “save money/save gas” as motivation for choosing an alternative to driving alone to work. Nevertheless, for the vast majority of all commuters - those who drive alone to work - cost is an insignificant factor because the cost of commuting (including parking provided to employees free by more than nine in ten employers) in Southern California continues to be extremely low. Only two percent of all commuters cited improvement of air quality as a motivating factor in choosing their travel mode. An additional one percent reported saving energy/fuel as a motivating factor.

A comparison of mode choice factors by primary commute mode is helpful for understanding the leading motivations for ridesharing. (Note: the sample bases for vanpool, rail, bicycle and walk are too small to be included; the sample base for bus riders is too small to form quantifiable conclusions but is shown here only to provide the relative weights of the specific factors). See Table 5.11. Not surprisingly, drive-alone commuters are far more

likely than carpoolers or bus riders to consider the need to have a vehicle available before, during, or after work hours, and variability of work hours. Carpoolers are more likely than drive-alone commuters to consider commuting costs, travel time, and “enjoy talking to someone” while bus riders are most likely to consider “having no other way to get to work” as a mode choice factor. When trip distance is considered, factors such as having vehicle during work (16% vs. 6%), commuting costs (19% vs. 4%), and convenience/flexibility (28% vs. 8%) are more likely to be considered by commuters who travel 45 or more miles one-way than by commuters who travel fewer than five miles.

5.6 CONSIDERATION OF ALTERNATIVE TRAVEL MODES

To learn about the potential for converting solo driving behavior to alternative commute modes and to identify the characteristics of commuters who are most likely to change, in every annual survey since 1989, drive alone respondents were asked if they would consider an alternative mode of transportation one or two days a week, just to see if they like it. Alternatives were mentioned to respondents one at a time. If a respondent said “yes” to any of the alternatives, the interviewer probed to find out whether the alternative was something they would definitely try or something they might try.

TABLE 5.11

FACTORS * CONSIDERED WHEN CHOOSING MODE BY PRIMARY COMMUTE MODE			
	Drive Alone	Carpool	Bus**
Convenience / Flexibility	29%	26%	11%
Travel Time	14	17	17
Having Vehicle During Work	10	5	0
Comfort / Relaxation	9	7	11
Work Hours	9	6	4
Reliability / Dependability	8	8	3
No Access to Alternatives	7	10	50
Commuting Costs * * *	6	15	14
Having Vehicle Before/After Work	6	3	0
Enjoy Talking to Someone	0	8	4
Base:	2,297	406	121

*Question posed on open-ended basis. Up to three responses were recorded, so percentages total more than 100 percent. Only factors mentioned by more than 5 percent are shown in Table.

**Base is too small for statistical confidence.

***Includes “save gas”.

TABLE 5.12

LIKELIHOOD OF TRYING AN ALTERNATIVE MODE ONCE OR TWICE A WEEK

Travel Mode	Definitely Would Try						Might Try						Would Not Try					
	'92	'93	'94	'96	'98	'99	'92	'93	'94	'96	'98	'99	'92	'93	'94	'96	'98	'99
Carpooling	20%	18%	16%	19%	15%	14%	13%	24%	24%	22%	26%	18%	67%	58%	60%	59%	59%	68%
Vanpooling (a)	16	18	23	20	13	15	11	16	14	17	20	12	73	64	63	63	67	72
Commuter Rail	6	17	14	11	7	8	9	12	8	10	8	8	85	71	78	79	85	84
Taking the Bus	7	8	6	2	5	5	6	10	7	1	11	8	87	82	87	97	84	87
Bicycling (b)	11	15	16	11	12	9	8	10	13	13	12	9	81	75	71	76	76	82
Walking or Jogging (c)	8	12	19	16	13	12	11	11	11	13	15	5	82	77	70	71	72	84

*NA = Not asked in the 1990 survey

(a) Among drive alone respondents with 21(+) miles one way

(b) Among drive alone respondents with 7 or fewer miles one way

(c) Among drive alone respondents with 3 or fewer miles one way

In order to maximize realistic options to commuters, only those traveling fewer than three miles were asked about walking; those traveling fewer than seven miles were asked about bicycling; and those traveling more than 20 miles were asked about vanpooling. Carpooling, bus and rail interest were asked of all commuters, regardless of the distance traveled.

Overall, there is more interest in carpooling and vanpooling than in any of the other alternative travel modes. Compared to findings from the 1998 survey, the percent of solo drivers who might try ridesharing declined significantly for all alternative modes with the exception of rail.

In order to identify ways to convert drive-alone commuters to rideshare modes, an analysis was conducted to learn about the characteristics of commuters who said they were open to try carpooling (only base large enough for analysis).

Taking a closer look at the drive-alone commuters who say they definitely would try carpooling revealed the following. Those who travel longer distances to work are more likely to consider carpooling (average 20 miles one-way vs. 16 miles for all other commuters); women are as open to carpooling as

men (both 14%); Hispanics are the most open to carpooling (16%) while Asians are the least (4%); production (20%) and secretarial/clerical workers (19%) are more open to carpooling than workers in other occupations (6-15%); commuters at regulated work sites with 250+ employees are much more likely to consider carpooling than those at smaller sites (20% vs. 12%).

Forty percent of drive-alone commuters are willing to try an alternative travel mode, lower than the 49 percent reported in 1998.

To gain a better understanding of the obstacles to ridesharing, commuters who exclusively drive alone were asked on a close-ended basis what may have prevented them from ridesharing.

The three leading reasons given by drive-alone commuters for not wanting to try carpooling include:

- ◆ Need my vehicle at work (28%);
- ◆ Work schedule too irregular (23%);
- ◆ Distance too short (17%).

The three leading reasons given by commuters for not wanting to try vanpooling include:

- ◆ Need my vehicle at work (43%);
- ◆ Work schedule too irregular (24%);
- ◆ Need my vehicle before/after work (8%).

The three leading reasons given by commuters for not wanting to try the bus include:

- ◆ Need my vehicle at work (26%);
- ◆ No bus available (17%);
- ◆ Distance too short (13%).

The three leading reasons given by commuters for not wanting to try rail include:

- ◆ Need my vehicle at work (27%);
- ◆ No train available (23%);
- ◆ Distance too short (15%).

5.7 ATTITUDES TOWARD AND USE OF HIGH OCCUPANCY VEHICLE (HOV) LANES

Respondents who travel on a freeway were asked “Is there a special commuter lane that can be used only by carpools, vanpools, or buses on the freeway that you travel to and from work on?” So as to reduce confusion, interviewers specified that “this does not include metered on-ramps.” Of the commuters who travel on a freeway as part of their commute (61% of all respondents), 55 percent claim to have HOV lanes available to them, continuing a steady increase since 1993 (53% in 1998, 48% in 1996, 43% in 1994, and 37% in 1993). Of all individuals who have access to HOV lanes, 18 percent actually used them at least once in the previous week. Of those who have access to an HOV lane and rideshare, 71 percent report that they traveled on an HOV lane at least once during the previous week. The average one-way commute distance¹ of HOV lane users is 26.5 miles, shorted than the 30.9 miles reported in 1998. However, this trip takes them, on average, 46 minutes to get to work and 55 minutes to return home, longer than the findings from the 1998 survey (36 and 47 minutes respectively).

Of those individuals who use an HOV lane, 89 percent believe the lane saves them time. When asked how much time is saved, respondents report an aver-



age time savings of 18 minutes (one-way). This represents a time saving of 28 percent of their commuting time (based on 88 cases).

Individuals who have access to an HOV lane and carpool, vanpool or take the bus at least one day a week but don't use the HOV lane (only 40 cases) were asked why. More than one-third of these commuters report that their travel distance on the freeway is too short (35%) to use the HOV lane. Nearly one-quarter (24%) believe the lanes save them too little time. Eleven percent said that they do not have enough people in the vehicle to qualify. The remaining responses varied among several categories.

Respondents who travel on a freeway as part of their commute to work and currently have no access to HOV lanes were asked whether they would be encouraged to rideshare if they had an HOV lane available to them. Of these commuters, thirty-nine percent said they personally would be encouraged to rideshare.

5.8 FAMILIARITY WITH REGIONAL PUBLIC AWARENESS CAMPAIGNS

A new set of questions regarding advertising for ridesharing was introduced in 1993. These questions were added to provide an understanding of commuters' familiarity with regional advertising. Less than half (46%) recall hearing, seeing or reading an advertisement for ridesharing within the last 12 months. This figure is slightly lower than the 49 percent reported in 1998 but is down significantly from the 62 percent reported in 1996, 69 percent in 1994, and 63 percent reported in 1993.

¹The distance is for the whole commute trip including the HOV lane segment.

The work place is the most frequently cited source of rideshare advertising (26%), followed by radio (22%), billboards (17%), newspapers (13%), television (12%), and the blue freeway signs (10%).

Commuters who recall a ridesharing advertisement were asked about the message conveyed. One-quarter of these commuters could not recall any message. The message with the most recall (15%) was “that you should rideshare.” Other messages recalled include, “call 1-800-COMMUTE” (11%), “Team Rideshare” (10%), “it would help the environment” (7%), “it saves time” and “it saves money” (both 5%).

Nine percent of commuters said they did try ridesharing after hearing or seeing rideshare advertising, similar to the results reported in 1998 (9%) and 1996 (8%).

5.9 COSTS OF COMMUTING

The cost of commuting is an important factor cited for changing to a rideshare mode and is the most frequently cited factor by carpoolers when choosing their travel mode. Therefore, in order to know about potential price sensitivities of alternatives to driving alone and the extent to which greater awareness of the costs of commuting might actually help to increase rideshare rates, it was important to know the extent to which commuters actually estimate their commuting costs.

Twenty-nine percent of respondents claimed to have previously calculated their commuting costs. Long-distance (30+ miles one-way) commuters are more likely than short distance (less than 5 miles) commuters to have calculated the costs of commuting before being prompted by the interview (40% vs. 20%). For all commuters - including those who had and had not previously estimated costs - the perceived monthly cost of commuting on average is \$92, lower than the \$99 reported in 1998 (The median is \$60 and the mode is \$40). Note: the distribution of estimates has a long tail because some commuters are evidently including not just operating costs but also ownership costs such as insurance and depreciation).

As expected, estimated costs of commuting are positively correlated with commute distance. The following are the average estimated monthly costs of commuting by distance segment as reported by the respondents.

One-Way Commute Distance	Estimated Monthly Commute Costs	Number of Cases
Under 5 miles	\$ 52	589
5 to 9 miles	67	511
10 to 14 miles	87	486
15 to 19 miles	95	337
20 to 24 miles	107	274
25 to 29 miles	118	156
30 to 34 miles	93	135
35 to 39 miles	128	71
40 to 44 miles	176	87
45 or more miles	211	179

Also, the average estimated monthly costs of commuting by primary travel mode as reported by the respondents are as follows:

Primary Travel Mode	Estimated Monthly Commute Costs	Number of Cases
Train/Rail	\$103	21
Drive Alone	97	2,268
Carpool	88	389
Vanpool	71	27
Public Bus	46	121
Motorcycle	43	3
Private Bus	38	1
Walk or Jog	25	8
Bicycle	23	12

6 County Comparisons*

6.1 INTRODUCTION

Each year since 1991, more than 500 interviews were completed (525 since 1994) with commuters residing in each of the five counties, including Los Angeles, Orange, Riverside, San Bernardino and Ventura. Beginning with the 1996 State of the Commute, 300 interviews were also completed in Imperial County. The map on the right shows the geographic locations of these six counties in the SCAG region. A sample size of 525 provides an acceptably accurate estimate (sampling error is $\pm 4.5\%$ at 95% confidence level) to allow for county comparisons. The regional profile detailed in the first five chapters of this report blurs the significant county differences and changes over time in level of traffic congestion, travel time, trip distance, alternative travel mode usage, awareness and participation in employer transportation programs, and parking issues. This chapter highlights the key county differences and trends.

All statistics by county reported in the tables in Chapter 6 refer to the respondent's home county, with the exception of statistics in tables 6.9, 6.12, 6.13, 6.14, and 6.16, which refer to the respondent's work county.



6.2 TRAVEL MODE

Primary travel mode used (3+ days per week) by home county for each survey year since 1994 is provided in Table 6.1.

The drive alone rate is again the lowest in Los Angeles County (77%), followed by San Bernardino and Ventura Counties (both 79%), Orange County (80%), Riverside County (83%), and is the highest in Imperial County (85%). Overall, the results are consistent with 1998 findings with the exception of Imperial County. The drive alone rate in Imperial County increased significantly from 79 percent in 1998 to 85 percent in 1999.

Usage of alternative travel modes is fairly consistent across county lines. However, the carpooling rate is lower in Imperial (10%) and Orange (11%) Counties than in the other four counties (14-16%) while the bus rate is higher in Los Angeles (6%) and Orange (3%) Counties than in the other three counties (1-2%).

Number of Surveys Completed by Home County:

Los Angeles	525
Orange	525
Riverside	525
San Bernardino	525
Ventura	525
Imperial	300
Total	2,925

*Note: As in years past, findings in chapters one through five have been weighted to reflect the commuting population residing in each county and by the number of full-time workers in the respondent's household. In Chapter 6, which covers county-specific results, only weighting to reflect the number of full-time workers in the household has been used.

TABLE 6.1

PRIMARY TRAVEL MODE BY HOME COUNTY

	Los Angeles				Orange				Riverside				San Bernardino				Ventura				Imperial*		
	'94	'96	'98	'99	'94	'96	'98	'99	'94	'96	'98	'99	'94	'96	'98	'99	'94	'96	'98	'99	'96	'98	'99
Drive Alone (#)	418	389	396	406	433	417	426	421	419	406	421	436	432	414	416	414	428	403	415	418	254	239	254
(%)	80	74	75	77	83	79	81	80	80	77	80	83	82	79	79	79	82	77	79	79	85	79	85
Carpool (#)	73	79	76	73	74	86	60	64	84	84	84	74	68	85	90	86	78	86	83	83	37	49	34
(%)	14	15	14	14	14	16	11	12	16	16	16	14	13	16	17	16	15	16	16	16	12	16	11
Vanpool (#)	7	5	6	5	2	2	6	6	10	10	4	4	2	2	4	1	4	13	11	7	1	3	4
(%)	1	1	1	1	0	0	1	1	2	2	1	1	0	0	1	0	1	3	2	1	0	1	1
Bicycle (#)	4	2	2	2	1	3	5	6	1	5	1	2	2	3	4	1	4	10	6	5	1	1	1
(%)	1	0	0	0	0	1	1	1	1	1	0	0	0	1	1	0	1	2	1	1	0	0	0
Motorcycle (#)	1	1	8	1	3	1	0	0	5	1	1	2	1	1	2	1	0	2	2	1	0	0	0
(%)	0	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Public Bus (#)	14	35	24	29	9	9	15	16	4	11	7	3	6	9	2	10	3	7	5	7	1	3	4
(%)	3	7	5	6	2	2	3	3	1	2	1	1	1	2	0	2	0	1	1	1	0	1	1
Commuter Rail (#)	1	4	3	5	0	3	4	1	0	7	1	2	5	8	2	5	3	0	0	3	0	0	0
(%)	0	1	1	1	0	1	1	0	0	1	0	0	1	2	0	1	0	0	0	1	0	0	0
Private Bus (#)	0	1	0	1	0	0	0	1	0	0	1	0	0	0	0	0	2	2	0	1	0	0	1
(%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk or Jog (#)	8	11	10	5	4	5	9	10	6	2	5	3	9	4	6	7	5	2	4	1	5	6	2
(%)	1	2	2	1	1	1	2	2	1	0	1	1	2	1	1	1	1	1	1	0	2	1	1
Base	517	525	525	525	517	525	525	525	518	525	525	525	518	525	525	525	520	525	525	525	300	300	300

* Imperial County was included for the first time in the 1996 study.

6.3 TRIP DISTANCE

The average one-way distance to work reported by commuters by county for the last five years can be found in Table 6.2.

With the exception of Orange and Imperial County commuters who experience an increase, commute distances remained consistent from 1998 to 1999 for commuters in all other counties. Commute distances are longest for Riverside County commuters and shortest for Imperial County commuters.

6.4 TRAVEL TIME TO AND FROM WORK

The average travel time to and from work for commuters by county over the last six surveys is shown in Tables 6.3 and 6.4.

Imperial County commuters report taking the least amount of time to get to and from work (47 minutes), while San Bernardino County commuters report taking the most time (76 minutes). Compared to the 1998 survey results, commute times for the trip to and from work are slightly longer in 1999

TABLE 6.2

COMMUTE DISTANCE IN MILES BY HOME COUNTY						
	1992	1993	1994	1996	1998	1999
Los Angeles	15.8	13.3	15.3	14.6	15.3	14.9
Orange	14.9	14.0	15.8	15.7	14.2	16.1
Riverside	20.9	22.8	22.2	24.1	21.0	21.6
San Bernardino	20.4	20.0	21.3	25.0	22.4	21.3
Ventura	17.7	15.4	16.2	17.8	15.9	16.3
Imperial*	NA	NA	NA	11.8	12.1	14.5

* Imperial County was included for the first time in the 1996 study.

TABLE 6.3

COMMUTING TIME FOR TRIP TO WORK BY HOME COUNTY						
Home County	1992	1993	1994	1996	1998	1999
Los Angeles	37 minutes	33 minutes	30 minutes	33 minutes	31 minutes	34 minutes
Orange	32	29	30	30	31	33
Riverside	38	37	36	38	36	37
San Bernardino	35	36	36	38	37	35
Ventura	28	26	28	28	26	27
Imperial*	NA	NA	NA	20	23	24

* Imperial County was included for the first time in the 1996 study.

TABLE 6.4

COMMUTING TIME FOR TRIP TO HOME BY HOME COUNTY						
Home County	1992	1993	1994	1996	1998	1999
Los Angeles	42 minutes	36 minutes	34 minutes	36 minutes	38 minutes	41 minutes
Orange	35	34	38	37	34	41
Riverside	41	43	43	46	40	38
San Bernardino	42	39	42	47	39	41
Ventura	32	30	31	32	30	33
Imperial*	NA	NA	NA	21	24	23

* Imperial County was included for the first time in the 1996 study.

for most counties. With the exception of Imperial County, the trip home takes longer than the trip to work.

With regard to perceptions of commute times compared to a year ago, Imperial County commuters (20%) were less likely to believe that their commute is longer now than it was one year ago than commuters in any other counties (29-35%). The percentages of commuters who feel their commute now takes longer than it did one year ago by county are:

Los Angeles	35%
Orange	33
Ventura	30
Riverside	29
San Bernardino	29
Imperial	20

With the exception of San Bernardino and Imperial Counties, these figures are higher than what was reported in 1998.

6.5 FREEWAY USAGE

Table 6.5 reports the historical share of commuters by home county who use a freeway as part of their commute. The freeway usage rate this past year increased significantly in Los Angeles and Orange Counties but remained about the same in the other four counties. Freeway usage is highest for commuters in Los Angeles and Orange Counties and lowest in Imperial County.

6.6 BUS AVAILABILITY

Respondents to the survey were asked whether they thought there was a bus they could take to get to work. Affirmative responses declined in all counties except in San Bernardino County (see Table 6.6).

6.7 SIDE TRIPS TAKEN BEFORE AND/OR AFTER WORK

Respondents were asked whether they make stops on the way to or from work. Incidence of trips taken on the way to work by county ranges from 17 percent in Orange County to 26 percent in San Bernardino County. The percent of commuters reporting that they make a stop on the way to work declined from 1998 to 1999 in four of the six counties.

TABLE 6.5

FREEWAY USAGE BY HOME COUNTY						
Home County	1992	1993	1994	1996	1998	1999
Los Angeles	53%	56%	54%	59%	54%	62%
Orange	51	53	57	63	55	62
Riverside	56	62	59	63	56	59
San Bernardino	51	61	54	61	57	54
Ventura	63	62	64	63	61	61
Imperial*	NA	NA	NA	37	38	36

* Imperial County was included for the first time in the 1996 study.

TABLE 6.6

AWARENESS OF BUS AVAILABILITY BY HOME COUNTY						
Home County	1992	1993	1994	1996	1998	1999
Los Angeles	41%	51%	44%	59%	54%	49%
Orange	38	39	29	52	51	40
Riverside	24	25	20	34	30	24
San Bernardino	18	26	26	37	34	34
Ventura	19	24	22	31	30	28
Imperial *	NA	NA	NA	35	29	23

* Imperial County was included for the first time in the 1996 study.

The percent of commuters who make stops on their way home from work by county is lower than findings from 1998 across all counties.

Commuters in almost every county are making fewer stops on the way to work or home compared to recent years.

6.8 PARKING

Respondents were asked if they paid for parking at their work site. As shown in Table 6.9, more than nine in ten commuters in every county receive free parking, which has not changed over the last nine years. Commuters who work in Los Angeles and Orange Counties are more likely to contribute to the

cost of parking than are commuters working in the other counties. There were too few respondents who paid for parking in each county to accurately assess the average monthly parking amount paid.

6.9 PARK AND RIDE LOT USAGE

Commuters who live in Los Angeles County are most apt to use park and ride lots in their commutes – 3.2 percent used a park and ride lot the week prior to the survey interview, followed by Riverside (2.9%), San Bernardino (2.4%), Ventura (2.1%), and Orange (1.5%). These figures are all lower than 1998 findings (2.1-5.4%).

TABLE 6.7

STOPS MADE ON WAY TO WORK BY HOME COUNTY						
Home County	1992	1993	1994	1996	1998	1999
Los Angeles	19%	20%	21%	25%	23%	20%
Orange	16	18	20	25	21	17
Riverside	22	19	28	26	26	21
San Bernardino	19	23	25	27	26	26
Ventura	17	24	24	26	25	18
Imperial *	NA	NA	NA	29	23	24

* Imperial County was included for the first time in the 1996 study.

TABLE 6.8

STOPS MADE ON WAY HOME BY HOME COUNTY						
Home County	1992	1993	1994	1996	1998	1999
Los Angeles	22%	32%	34%	32%	30%	23%
Orange	27	22	34	34	23	21
Riverside	26	27	35	31	29	25
San Bernardino	28	32	31	32	28	27
Ventura	27	31	36	33	27	26
Imperial*	NA	NA	NA	34	29	24

* Imperial County was included for the first time in the 1996 study.

TABLE 6.9

EMPLOYEE SHARE OF PARKING COST BY WORK COUNTY						
Employee Share	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
All	4%	4%	2%	1%	0%	2%
Some	2	1	0	0	1	1
None	94	95	98	99	99	97

6.10 ALTERNATE ROUTE USAGE

Respondents were asked if they ever change their usual route and take an alternate route when traffic is jammed. Commuters in Orange and Ventura Counties were the most likely (both 69%) while commuters in Imperial County were the least likely (53%) to take an alternate route.

If radio traffic reports included alternate route information, commuters living in Ventura County were most likely to use an alternate route (71%) while commuters living in Imperial County were least likely (64%).

6.11 HIGH OCCUPANCY VEHICLE LANES

Commuters who travel on a freeway during their commute were asked whether their freeway had a special commuter lane (HOV lane) reserved for carpools, vanpools, or buses. Affirmative responses to this question are broken down by home county as follows:

County	HOV Availability
Los Angeles	56%
Orange	74
Riverside	43
San Bernardino	39
Ventura	20
Imperial	17

By far, those who live in Orange County continue to have the greatest access to HOV lanes.

Respondents who currently do not have access to an HOV lane were asked whether the availability of these lanes would personally encourage them to carpool, vanpool, or take the bus. Orange County commuters were the most positive: 43 percent said HOV lanes would provide them an encouragement to rideshare; this was followed by 41 percent in Los Angeles County, 40 percent in Imperial County, 39 percent in both Riverside and San Bernardino Counties, and 38 percent in Ventura County.

6.12 WORK COUNTY LOCATION

Tables 6.10 and 6.11 illustrate work county locations by home county. The matrix in Table 6.10 reports the findings of the 1999 State of the Commute; the matrix in 6.11 shows the estimated results for 1997 based on SCAG's Regional Transportation Model. Differences may be the result of a combination of slightly different populations (see footnote), actual changes that have taken place in the region since 1997, and sampling error incurred in each survey and through the comparison of two samples.

6.13 EMPLOYER-PROVIDED TRANSPORTATION INFORMATION AND SERVICES

Respondents were first asked whether they were aware of their employer offering specific information or services to encourage employees to carpool, van-

TABLE 6.10

HOME COUNTY BY WORK COUNTY

Work County	Home County					
	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
Los Angeles	90%	17%	8%	16%	18%	0%
Orange	6	79	10	7	0	0
Riverside	0	0	68	9	0	1
San Bernardino	2	2	8	68	0	0
Ventura	2	0	1	0	80	1
San Diego	0	1	4	0	1	1
Imperial	0	0	1	0	0	97

Note: Percentages add to less than 100% in some cases due to rounding.

TABLE 6.11

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS 1997 REGIONAL TRANSPORTATION MODEL*

Home County					
Work County	Los Angeles	Orange	Riverside	San Bernardino	Ventura
Los Angeles	96%	19%	14%	34%	24%
Orange	3	80	23	8	0
Riverside	0	0	51	7	0
San Bernardino	1	1	13	52	0
Ventura	1	0	0	0	76

Note: Percentages do not add to 100% in some cases due to rounding.

*Home-based work person trips, including part-time and under-age-18 workers.

Source: 1997 Model Validation & Summary-Regional Transportation Model, Table 5-1, page 43, SCAG.

pool, take the bus, walk or bicycle to work. Levels of awareness of these programs by work county are illustrated in Table 6.12.

The majority of all commuters in each county are aware of at least one type of employer-provided transportation information or service offered at the work site. The percentage of commuters in each county aware of at least one type of program is consistent across county lines: 79 percent in Orange County, 75 percent in Los Angeles and Ventura Counties, 72 percent in San Bernardino County, 71 percent in Riverside and Imperial Counties.

Program awareness continued to decline for most programs in Los Angeles, Ventura, and Orange Counties from 1998 to 1999 while it stabilized or even improved slightly in the other three counties.

Less than one out of nine workers in each county (ranging from 0% in Imperial County to 11% in Los Angeles County) report an awareness of financial incentives to rideshare, i.e., “subsidizes ridesharing” or “gives employees a monthly allotment of money,” offered by their employers. However, more than seven out of ten workers in each county (ranging from 71% in Imperial County to 79% in Orange County) report an awareness of non-financial incentives to rideshare such as “guarantees a ride home in case of emergency” and “provides ridesharing information.” Across all counties, commuters were most aware of flexible work hours, guaranteed ride home, and provision of ridesharing information.

When programs were offered by their employer, respondents were asked which, if any, they personally use. With the exception of Imperial and Riverside Counties, program participation increased for most programs in the other four counties from 1998 to 1999, particularly in Los Angeles, Ventura, and San Bernardino Counties (participation increases in more than eight of the thirteen programs). This represents a reversal of the broad decline from 1996 to 1998. Participation in compressed work week schedules is overall consistent to the 1998 results after plummeting in 1996.

6.14 TELECOMMUTING

Respondents, who are all working full-time outside of the home, were asked whether they had the opportunity to work at home instead of going to their regular work site. Commuters in Orange County (12%) are more likely to have the opportunity to work at home than their counterparts in the other counties (6-8%). Incidences by county have not changed significantly over the previous survey periods (see Table 6.14). Among those given the opportunity, likelihood of seizing the opportunity continues to be very high in all counties.

6.15 RECOGNITION OF 1-800-COMMUTE TELEPHONE NUMBER

Commuters were asked whether they have heard of the 1-800-COMMUTE telephone information number. Responses to these questions can be found in Tables 6.15 and 6.16, first by home county and then by work county.

TABLE 6.12

AWARENESS OF EMPLOYER TRANSPORTATION PROGRAMS BY WORK COUNTY

	Los Angeles				Orange				Riverside				San Bernardino				Ventura				Imperial			
	'94	'96	'98	'99	'94	'96	'98	'99	'94	'96	'98	'99	'94	'96	'98	'99	'94	'96	'98	'99	'94	'96	'98	'99
Offers Flexible Hours	41%	49%	48%	47%	45%	53%	50%	54%	35%	43%	47%	45%	36%	45%	43%	42%	39%	45%	48%	44%	45%	46%	50%	
Offers 4/40 Work Schedule	21	21	18	19	17	24	16	19	17	18	16	18	16	19	17	21	22	21	17	20	18	23	21	
Offers 9/80 Work Schedule	11	10	11	9	11	9	10	9	12	14	10	10	12	13	9	8	15	18	13	10	14	12	9	
Provides Ridesharing Info	42	49	38	35	36	42	32	30	38	36	27	24	28	42	26	28	38	38	32	25	11	9	15	
Assists in Carpool & Vanpool Formation	40	42	33	32	32	35	26	25	33	34	21	25	32	31	21	22	34	38	24	23	8	6	14	
Guarantees a Ride Home in Case of an Emergency	41	43	40	35	38	40	39	34	48	45	41	40	40	41	39	37	49	47	36	42	38	43	39	
Provides Preferred Parking Spaces to Ridesharers	29	33	30	26	24	29	25	22	17	29	18	23	24	25	18	18	27	28	21	16	8	13	11	
Registers Employees with Rideshare Agency	20	28	19	14	14	19	12	9	11	19	10	10	11	19	9	11	18	16	12	8	3	3	3	
Provides Bus/Rail Routes/Schedules Info	24	27	19	16	20	20	13	14	18	20	10	11	16	19	15	12	14	18	11	9	6	6	7	
Provides Free/Low Cost Parking to Ridesharers	10	15	14	10	8	9	14	10	8	14	7	10	7	10	10	11	5	10	9	10	5	8	8	

TABLE 6.12 (cont'd)

AWARENESS OF EMPLOYER TRANSPORTATION PROGRAMS BY WORK COUNTY

	Los Angeles					Orange				Riverside				San Bernardino				Ventura				Imperial		
	'94	'96	'98	'99		'94	'96	'98	'99	'94	'96	'98	'99	'94	'95	'98	'99	'94	'95	'98	'99	'96	'98	'99
Subsidizes Ridesharing	22%	18%	11%	11%		22%	20%	11%	8%	16%	17%	8%	4%	15%	11%	6%	6%	15%	8%	9%	6%	2%	2%	2%
Sells Bus/Rail Passes	13	13	9	7		7	7	7	7	6	8	5	3	6	8	5	3	4	3	3	2	2	1	1
Offers a Company Car During the Day to Ridesharers	10	11	10	7		10	6	8	10	10	8	6	11	9	6	8	8	8	9	12	11	10	12	7
Has Contests/Prizes for Ridesharers	25	25	14	11		23	23	12	11	19	22	9	10	19	20	10	13	18	16	10	7	1	1	1
Gives each Employee a Monthly Allotment of Money to Reduce Commuting Costs	13	5	6	6		8	6	6	6	5	5	3	3	7	4	2	4	9	4	4	3	2	1	2

NA = Not Applicable in Orange County

TABLE 6.13

PARTICIPATION IN EMPLOYER TRANSPORTATION PROGRAMS BY WORK COUNTY

	Los Angeles				Orange				Riverside				San Bernardino				Ventura				Imperial		
	'94	'96	'98	'99	'94	'96	'98	'99	'94	'96	'98	'99	'94	'96	'98	'99	'94	'96	'98	'99	'96	'98	'99
Flexible Work Hours	67%	72%	72%	74%	69%	72%	75%	79%	77%	66%	74%	76%	67%	65%	80%	73%	63%	74%	76%	71%	66%	75%	70%
4/40 Work Schedule	57	20	11	13	56	14	16	10	39	20	9	8	30	12	10	15	63	11	18	13	4	9	2
9/80 Work Schedule	42	24	35	26	50	32	21	42	40	54	27	24	51	22	27	53	52	28	42	36	13	33	23
Ridesharing Information	27	37	28	30	25	31	28	32	31	37	30	28	22	40	19	29	28	32	22	32	13	17	10
Carpool & Vanpool Formation Assistance	30	34	31	24	29	30	24	32	31	29	23	30	22	33	27	26	29	28	25	33	38	24	16
Preferential Parking Spaces to Ridesharers	33	35	26	27	32	35	37	34	33	35	25	24	26	35	30	33	30	40	29	23	52	43	36
Registration with Rideshare Agency	25	51	39	40	27	56	30	21	15	59	44	46	27	50	49	58	24	51	30	50	86	33	14
Bus/Rail Information On Routes & Schedules	18	24	22	37	15	10	16	16	12	23	8	7	7	16	20	11	13	14	5	21	31	31	10
Free/Low Cost Parking to Ridesharers	33	33	31	32	36	38	39	46	23	43	24	31	9	41	13	49	19	47	54	55	64	67	46
Rideshare Subsidies	36	42	32	54	36	30	24	56	23	36	34	29	26	21	17	38	27	20	29	30	83	33	0
Bus/Rail Pass Sales	11	24	15	35	5	6	31	6	16	7	15	8	5	3	12	9	-	8	0	38	0	0	50
Contest Prizes for Ridesharers	37	41	32	42	36	40	32	38	32	41	46	34	20	29	39	39	38	40	32	43	0	0	0
Monthly Allotment of Money to Reduce Commuting Costs	50	63	55	48	35	13	61	59	13	60	62	40	28	8	40	62	47	79	47	54	71	75	50

NA = Not Applicable in Orange County

As can be seen, awareness of the 1-800-COMMUTE number is notably lower in Riverside and Imperial Counties than in other counties. Awareness of the 1-800 COMMUTE number continued to drop from 1998 to 1999 in most counties particularly in Riverside (home county - 27% in 1999 vs. 33% in 1998; work county - 23% vs. 32%) and Ventura (home county - 30% vs. 36%; work county - 28% vs. 34%) counties. Recognition of 1-800-COMMUTE is much lower than its predecessor, a RIDE-number, which generated awareness levels of 60 percent across all counties. The 1-800-COMMUTE telephone number was implemented in 1994 in the aftermath of the Northridge earthquake.

Frequency and consistency in any advertising message is needed to achieve higher levels of public awareness.

6.16 PERCEPTIONS OF FREEWAY TRAFFIC

Freeway users were asked to rate traffic on the freeways they commute on and to compare current traffic to what traffic was like one year ago. The following tables illustrate responses by county.

Compared to 1998 findings, more commuters in four of the six counties are rating their freeway traffic as more often bad or always bad and fewer com-

TABLE 6.14

OPPORTUNITY TO WORK AT HOME AND CURRENTLY WORK AT HOME BY WORK COUNTY						
	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial *
Opportunity To Work At Home	8%	12%	7%	6%	8%	6%
Currently Work At Home**	84	84	82	92	74	81

* Sample is too small for statistical reliability ** Based on group with opportunity

TABLE 6.15

RECOGNITION OF 1-800-COMMUTE TELEPHONE INFORMATION NUMBER BY HOME COUNTY						
	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
Heard Of 1-800-COMMUTE	35%	27%	27%	35%	30%	10%

TABLE 6.16

RECOGNITION OF 1-800-COMMUTE TELEPHONE INFORMATION NUMBER BY WORK COUNTY						
	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
Heard Of 1-800-COMMUTE	36%	30%	23%	33%	28%	10%

TABLE 6.17

PERCEPTIONS OF FREEWAY TRAFFIC BY HOME COUNTY						
	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
Always Bad	19%	19%	20%	22%	9%	4%
More Often Bad	17	19	13	18	14	5
Mixed	33	37	25	28	29	11
More Often Good	21	14	21	16	30	30
Always Good	10	12	23	16	18	51

muters in all counties except Imperial County are rating their freeway traffic as more often good or always good.

San Bernardino and Orange County freeway users perceive freeway traffic to be worse than do commuters in other counties. Imperial and Ventura County commuters who use freeways to get to work are far more likely than commuters in other counties to perceive freeway traffic as always good.

Freeway commuters were also asked to compare current freeway traffic to freeway traffic one year ago. Table 6.18 shows commuters' assessments for each of the six counties.

Compared to 1998, more commuters in virtually all counties are rating freeway traffic as worse than one year ago while fewer commuters are rating freeway traffic as better than one year ago.

6.17 PERCEPTIONS OF SURFACE STREET TRAFFIC DURING THE COMMUTE

All survey respondents were asked to rate traffic on the surface streets they commute on and to compare current traffic to what traffic was like one year ago. Tables 6.19 and 6.20 illustrate responses by county.

Overall, the perception of surface street traffic is slightly worse than 1998 findings with even more commuters in almost every county rating surface street traffic as "mixed." Except in Imperial County, commuters in all other counties have better perceptions of surface street traffic than they do freeway traffic. Nonetheless, commuters in Imperial County are the most positive about surface street traffic.

Commuters were also asked to rate current street traffic compared to street traffic one year ago. Table 6.20 shows commuters' assessments by county.

TABLE 6.18

COMPARISON OF CURRENT FREEWAY TRAFFIC TO ONE YEAR AGO BY HOME COUNTY						
Traffic Now Is:	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
Better Than Year Ago	12%	19%	12%	9%	5%	7%
Same As Year Ago	45	42	38	38	49	62
Worse Than Year Ago	43	39	50	53	46	31

TABLE 6.19

PERCEPTIONS OF SURFACE STREET TRAFFIC BY HOME COUNTY						
	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
Always Bad	11%	12%	12%	10%	6%	5%
More Often Bad	10	11	11	9	10	8
Mixed	40	42	32	36	36	27
More Often Good	25	20	23	22	26	25
Always Good	15	16	23	23	21	36

TABLE 6.20

COMPARISON OF CURRENT SURFACE STREET TRAFFIC TO ONE YEAR AGO BY HOME COUNTY						
Traffic Now Is:	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
Better Than Year Ago	10%	10%	8%	8%	8%	13%
Same As Year Ago	58	55	57	58	54	62
Worse Than Year Ago	32	35	35	34	38	25

Commuters in each of the counties are most likely to say traffic is “the same” and least likely to say traffic is “better” than one year ago.

6.18 COMMUTE SATISFACTION

Commuters were asked to rate their commutes on a one to nine scale, where one represents the greatest level of dissatisfaction, and nine, the greatest level of satisfaction. Average satisfaction levels by home county are slightly worse than findings from 1998 in four of the six counties. Nonetheless, in general, commuters are still more satisfied with their commute now than they were in 1992.

6.19 COMMUTER STRESS

In order to explore the extent to which commuting adds stress to the lives of workers in the region, the State of the Commute includes questions on commute-related stress. Commuters were asked three questions: how often they are bothered by traffic, whether they need to wind down after their trip before starting work, and whether they feel

their commute home has a negative impact on their home life.

Of the three questions, responses to the question concerning how often commuters say they are bothered by traffic suggest the highest level of stress. Compared to 1998 findings, more commuters in Riverside, Los Angeles, and Orange Counties report that they are bothered by traffic congestion.

6.20 COMMUTER CONCERNS

Respondents were asked which factors they consider when choosing their means of transportation to work. As in years past, the most frequent response by far was convenience/flexibility. Compared to 1998 findings, the level of response for convenience/flexibility as a factor for choosing a travel mode increased in all counties except in Imperial. Across county lines, commuters are less likely to consider reliability/dependability as a factor they consider when choosing their means of transportation to work. (See Table 6.23).

TABLE 6.21

OVERALL COMMUTE SATISFACTION RATING BY HOME COUNTY						
Home County	1992	1993	1994	1996	1998	1999
Los Angeles	5.9	6.5	6.6	6.5	6.7	6.4
Orange	6.0	6.2	6.4	6.6	6.6	6.3
Riverside	6.5	6.2	6.5	6.6	6.8	6.5
San Bernardino	6.4	6.3	6.8	6.5	6.8	6.5
Ventura	6.5	6.6	6.9	6.9	6.8	6.8
Imperial*	NA	NA	NA	7.3	7.4	7.5

* Imperial County was included for the first time in the 1996 study.

TABLE 6.22

MEASURES OF COMMUTER STRESS BY HOME COUNTY						
	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
Bothered By Traffic: “Very Often”	21%	20%	18%	17%	14%	6%
Need To Wind Down Before Work: “Very Often”	8	7	11	9	8	2
Commute Home Has Negative Impact on Home Life: “Quite a Bit” & “Very Much”	11	7	10	8	8	4

TABLE 6.23

TOP 10 COMMUTER CONCERNS BY HOME COUNTY

	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
1. Convenience / Flexibility	27%	31%	29%	28%	26%	18%
2. Travel Time	14	17	15	14	14	14
3. Comfort / Relaxation	10	8	7	5	4	8
4. No Access To Alternative Modes	10	7	11	11	11	16
5. Vehicle Availability At Work	8	9	7	10	8	9
6. Work Hours /Schedule	8	10	10	9	8	12
7. Commuting Cost	7	10	11	10	9	9
8. Reliability / Dependability	7	7	8	8	9	6
9. Not Being Dependent	7	5	5	4	5	6
10. Having Vehicle Before/After Work	6	6	5	3	7	6

6.21 CONSIDERATION OF ALTERNATIVE TRAVEL MODES

In order to monitor readiness to switch to alternative travel modes, drive-alone commuters were asked if they would try other means of transportation one or two days a week, just to see if they like it. Respondents were questioned on each alternative separately. Shares of commuters interested in trying the various alternatives by county are reported in Table 6.24.

Drive-alone commuters are most open to trying carpooling and vanpooling. Compared with 1998 findings, interest dropped in virtually every alternative mode especially carpooling and vanpooling.

6.22 COSTS OF COMMUTING

By county, respondents only differ slightly as to whether they have previously estimated their commute costs.

Estimates of monthly commute costs (asked of all respondents) is highest, on average, among San Bernardino County commuters (\$101) and lowest among Ventura County commuters (\$86) (See Table 6.25).

TABLE 6.24

WILLINGNESS TO CONSIDER USING AN ALTERNATIVE MODE BY HOME COUNTY

Would Consider	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
Carpool	31%	32%	37%	33%	36%	34%
Vanpool (a)	20	27	31	27	30	21
Rail	17	15	16	14	14	12
Bus	12	13	13	15	15	19
Bicycle (b)	17	19	14	16	20	23
Walking (c)	16	15	15	16	11	25

(a) Among drive alone respondents with commutes of over 20 miles one way

(b) Among drive alone respondents with commutes of under 8 miles one way

(c) Among drive alone respondents with commutes of under 4 miles one way

TABLE 6.25

COSTS OF COMMUTE BY HOME COUNTY						
	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
Have Evaluated Costs of Commute	28%	28%	32%	32%	28%	33%
Estimated Monthly Costs (Average)*	\$90	\$97	\$96	\$101	\$85	\$86

* Based on answers from all respondents.

6.23 SUMMARY OF MAJOR CHARACTERISTICS BY COUNTY

Summary statistics reported in this section represent county residents regardless of whether they work in the same county or commute to work outside the county in which they live. The only exception is for employer programs, where awareness and participation rates are reported for commuters who work in each specific county.

Los Angeles County

- ◆ Primary drive alone rate is 77 percent, the lowest of the six counties.
- ◆ Highest use of alternative modes.
- ◆ Average one-way commute distance is 14.9 miles, down slightly from 15.3 miles in 1998.
- ◆ Average round-trip commute time is 75 minutes a day, higher than the 69 minutes reported in 1998.
- ◆ Sixty-two percent utilize freeways for commuting purposes.
- ◆ Highest awareness of bus availability (59%) of the six counties, up again from 54 percent reported in 1998.
- ◆ Self-reported HOV lane access by commuters who travel on a freeway during their commute is 56 percent.
- ◆ Least likely to commute to another county to work (only 10%).
- ◆ Los Angeles County workers are among the most likely to be aware of the 1-800-Commuter telephone information number.
- ◆ Overall commute satisfaction declined slightly to 6.4 from 6.7 in 1998.
- ◆ Factors considered when selecting commute mode are similar to those of commuters in other counties.

- ◆ Los Angeles County commuters are the most willing to consider rail but least willing to consider carpool, vanpool, and bus on a trial basis; willingness to consider carpooling declined significantly from 41 percent in 1998 to 31 percent in 1999.

Orange County

- ◆ Primary drive-alone rate is 80 percent, virtually the same as in 1998.
- ◆ Commute distance increased to 16.0 miles from 14.2 miles in 1998.
- ◆ Nearly one in six (17%) commute to Los Angeles County.
- ◆ Average round-trip commute time is 74 minutes, higher than the 65 minutes reported in 1998.
- ◆ Use of a freeway during the commute increased significantly to 62 percent from 55 percent in 1998.
- ◆ Continues to have the highest rate of HOV lane availability (74%).
- ◆ Orange County commuters are much more likely to perceive the flow of traffic on freeways to be "better than a year ago."
- ◆ Continues to have the lowest commute satisfaction level (6.3).
- ◆ Orange County commuters are the most concerned about convenience/flexibility and travel time when choosing their means of transportation to work.
- ◆ Orange and Riverside County commuters are more likely to perceive their surface street traffic to be bad than commuters in other counties.

Riverside County

- ◆ Primary drive-alone rate is 83 percent, up again from 80 percent in 1998.
- ◆ Carpooling declined to 14 percent in 1999 from 16 percent in 1998.
- ◆ The average one-way commute distance is the longest of the six counties (21.6 miles).
- ◆ Average round-trip commute time is 75 minutes, virtually the same as in 1998.
- ◆ Nearly one in three (32%) of Riverside commuters travel to work outside of Riverside County, among the highest of the six counties.
- ◆ Awareness of bus availability is at 24 percent, among the lowest of the six counties.
- ◆ Drive-alone commuters in Riverside County are most willing to consider carpool and van-pool on a trial basis.
- ◆ Riverside and Orange County commuters are more likely to perceive their surface street traffic to be bad than do commuters in other counties.
- ◆ The overall commute satisfaction rating declined slightly from 6.8 in 1998 to 6.5 in 1999.

San Bernardino County

- ◆ Primary drive-alone rate is 79 percent.
- ◆ Carpooling share is 16 percent, among the highest of the six counties.
- ◆ One-way trip distance declined slightly from 22.4 miles in 1998 to 21.3 miles in 1999 but still is the second highest of all counties.
- ◆ San Bernardino County commuters spend the most time commuting to and from work (76 minutes).
- ◆ Nearly one third of residents (32%) travel outside of San Bernardino County to go to work, among the highest of all counties.
- ◆ Use of freeways for commuting purposes continued to decrease from 57 percent in 1998 to 54 percent in 1999.
- ◆ Over one-third of San Bernardino County commuters (35%) are aware of the 1-800-

Commute telephone information number, among the highest of the six counties.

- ◆ Commuters in San Bernardino County are more likely to perceive freeway traffic to be more often bad or always bad than commuters in the other counties. They are also more apt to perceive that freeway traffic is worse now than one year ago.
- ◆ The overall commute satisfaction rating by San Bernardino County commuters dropped slightly from 6.8 in 1998 to 6.5 in 1999.
- ◆ Estimate of monthly commuting costs was the highest on average (\$101).

Ventura County

- ◆ Primary drive-alone rate is 79 percent, the same as in 1998.
- ◆ Alternative travel mode usage is 21 percent, with carpooling accounting for a 16 percent share.
- ◆ Commute distance increased slightly from 15.9 miles to 16.3 miles.
- ◆ Average round-trip commute time is 60 minutes which is slightly higher than 1998 findings.
- ◆ Freeway usage for commuting purposes is consistent with 1998 findings (61%).
- ◆ Second only to Imperial County for the lowest HOV lane availability (20%).
- ◆ Commute satisfaction rating of 6.8 is consistent with findings from 1998.
- ◆ Estimate of monthly commuting costs was the lowest on average (\$85).

Imperial County

- ◆ Primary drive-alone rate is 85 percent, the highest of the six counties.
- ◆ Lowest alternative travel mode usage at 15 percent.
- ◆ One-way commute distance is the shortest of the six counties at 14.5 miles.
- ◆ Shortest average round-trip commute time at 47 minutes.
- ◆ Least likely (20%) to believe their travel time is longer now than a year ago.

- ◆ Lowest usage of freeways for commuting purposes (36%).
- ◆ Lowest HOV lane availability (17%).
- ◆ Least likely to commute to another county to work (3%).
- ◆ By far the lowest awareness of the 1-800-Commute telephone information number (10%).
- ◆ Imperial County commuters are much more likely to perceive that their freeway traffic is always good than are commuters in other counties and are the least likely to believe traffic is worse now than one year ago.
- ◆ Likewise, Imperial County commuters are the most apt to perceive that their surface street traffic is always good and are the least likely to believe traffic is worse now than one year ago.
- ◆ Overall commute satisfaction rating is highest among Imperial County commuters (7.5).
- ◆ Imperial County commuters report the lowest level of stress during the commute.
- ◆ Imperial County commuters are the most willing to try bus, bicycling, and walking on a trial basis.

7 Survey of At-Home Workers

7.1 INTRODUCTION

As an effort to collect additional important data for transportation planning purposes, especially for providing up-to-date inputs to the regional transportation model, a brief survey of at-home workers was designed and implemented concurrently with the regular 1999 State of the Commute Survey. The target population of the new survey, the at-home workers, include individuals who live within the six-county SCAG region, are 18 years or older, work at least 35 hours a week, and whose primary workplace is home. The only difference in terms of eligibility criteria between the new survey and the regular State of the Commute survey lies in the primary workplace: home vs. outside location. Although the new survey did not collect commute related information, the survey results are reported in this report since the implementation of the new survey is integrated with that of the regular 1999 State of the Commute Survey. Both surveys used the same sample of telephone numbers, applied the same survey methodology, and were conducted simultaneously. In addition, for every county, the new survey concluded when the number of completed State of the Commute surveys reached the county quota. The final new survey data was weighted following the same weighting procedure used in the State of the Commute surveys but with slightly different weight-

ing factors. The number of full-time workers in the household was the only weight used for deriving county statistics. For regional statistics, an additional factor - the number of full-time workers by county - was also used to weight the data.

7.2 DEMOGRAPHIC CHARACTERISTICS: AT-HOME WORKERS VS. COMMUTERS

Nearly one in ten full-time workers in the region (9.5%) works primarily at home. The percentage is the highest in San Bernardino County (10.5%) and the lowest in Imperial County (7.7%) (see Table 7.1). Over 80 percent of at-home workers are self-employed, compared to only 12 percent of commuters (see Table 7.2). By gender, at-home workers are more likely to be women than men (52% vs. 48%) (see Table 7.3). Compared to the commuter population, more at-home workers are in the older age group of 50-59 while fewer are in the younger age group of 20-29 (see Table 7.4). Considerably more at-home workers are in the lowest income category of under \$20,000 (see Table 7.5). More at-home workers are White, not Hispanic and fewer are Hispanic, compared to the commuter population (see Table 7.6). Compared to commuters, more at-home workers classify themselves as senior managers or sales/service workers while fewer classify themselves as middle managers (see Table 7.7).

TABLE 7.1

PERCENT OF AT-HOME WORKERS BY HOME COUNTY

Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial
9.5%	9.8%	8.7%	10.5%	8.3%	7.7%

TABLE 7.2

EMPLOYMENT STATUS: AT-HOME WORKERS VS. COMMUTERS

	At-home Workers	Commuters
Self-employed	80%	12%
Work with Employer	20	88
Total	100	100

TABLE 7.3

GENDER: AT-HOME WORKERS VS. COMMUTERS

	At-home Workers	Commuters
Female	52%	46%
Male	48	54
Total	100	100

TABLE 7.4

AGE: AT-HOME WORKERS VS. COMMUTERS

Age in Years	At-home Workers	Commuters
Less than 20	3%	3%
20-29	17	27
30-39	25	30
40-49	25	22
50-59	24	14
60+	6	4
Total	100	100

TABLE 7.5

HOUSEHOLD INCOME: AT-HOME WORKERS VS. COMMUTERS

Household Income	At-home Workers	Commuters
Under \$20,000	24%	13%
\$20,000 to \$34,999	11	17
\$35,000 to \$49,999	14	20
\$50,000 to \$64,999	15	14
\$65,000 to \$79,999	11	11
\$80,000 to \$99,000	11	9
\$100,000 and over	14	15
Total	100	100

TABLE 7.6

ETHNIC GROUP: AT-HOME WORKERS VS. COMMUTERS

Ethnic Group	At-home Workers	Commuters
White, not Hispanic	60%	46%
African-American	7	6
Hispanic	23	36
Asian	9	9
Other	1	2
Total	100	100

TABLE 7.7

OCCUPATION: AT-HOME WORKERS VS. COMMUTERS

Occupation	At-home Workers	Commuters
Secretary/Clerical	8%	11%
Production	7	10
Senior Mgt.	10	4
Middle Mgt.	3	10
Maintenance	6	6
Sales/Service	36	27
Professional	20	25
Construction	5	6
Other	5	1
Total	100	100

APPENDIX A:

1999 State of the Commute Questionnaire

QUESTIONNAIRE WITH LOGIC & SKIP PATTERNS

QUESTIONNAIRE = SCAG98B

FINAL

```
*****
*          CODE BOX :          *
*          *                   *
* LT = LESS THAN      ( < ) *
* GT = GREATER THAN   ( > ) *
* EQ = EQUALS         ( = ) *
* NE = NOT EQUAL TO   ( # ) *
*****
```

GOOD EVENING, THIS IS _____ WITH SCR CALLING ON BEHALF OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS. WE ARE NOT SELLING ANYTHING. WE ARE JUST TALKING TO PEOPLE ABOUT THEIR COMMUTE SO TRANSPORTATION IN SOUTHERN CALIFORNIA CAN BE IMPROVED. I'D LIKE TO ASK YOU A FEW QUESTIONS. CAN YOU HELP US OUT?

```
*****
1. OF THE PEOPLE 18 OR OLDER WORKING 35 HOURS OR MORE PER WEEK, HOW
   MANY WORK OUTSIDE THE HOUSE AT LEAST 35 HOURS PER WEEK ?
```

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
10. 10
11. 11
12. NONE
13. REFUSED/DON'T KNOW
14. OTHER (OTHER LINE = 413)

(PROMPT ONLY IF NO ANSWER)

```
SKIP BEFORE Q1  IF Q<235> LT "1" THEN GO 235
SKIP AFTER  Q1  IF Q<1> EQ "12" THEN GO END
SKIP AFTER  Q1  IF Q<1> EQ "13" THEN GO END
```

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*****
8. HOW MANY DAYS DO YOU USUALLY TRAVEL TO WORK IN A WEEK ?
```

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. NONE

***SURVEYOR'S NOTE: IF RESPONSE IS NONE ASK, "MAY I SPEAK WITH SOMEONE

WHO WORKS OUTSIDE OF THE HOME AT LEAST 35 HOURS PER WEEK
AND HAS THE MOST RECENT BIRTHDAY ? IF NO, TERMINATE

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q8 IF Q<8> EQ "8" THEN GO END

9. NOW I'M GOING TO ASK YOU ABOUT HOW YOU GET TO WORK IN A TYPICAL WEEK. IF
YOU USE MORE THAN ONE WAY TO GET TO WORK ON THE SAME DAY, LIKE TAKING BOTH
THE BUS AND THE TRAIN, PLEASE TELL ME ABOUT ONLY THE ONE MODE YOU USE
FOR THE LONGEST PART OF THE TRIP.

OF THE <<COMMUTE.DAYS>> THAT YOU COMMUTE TO WORK IN A TYPICAL WORK WEEK,
HOW MANY OF THESE DO YOU DRIVE ALONE?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. NONE

(PROMPT ONLY IF NO ANSWER)

10. OF THE <<COMMUTE.DAYS>> THAT YOU COMMUTE TO WORK IN A TYPICAL WORK WEEK,
HOW MANY OF THESE DO YOU CARPOOL INCLUDING WITH FAMILY MEMBERS?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. NONE

(PROMPT ONLY IF NO ANSWER)

11. OF THE <<COMMUTE.DAYS>> THAT YOU COMMUTE TO WORK IN A TYPICAL WORK WEEK,
HOW MANY OF THESE DO YOU VANPOOL ?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. NONE

(PROMPT ONLY IF NO ANSWER)

12. OF THE <<COMMUTE.DAYS>> THAT YOU COMMUTE TO WORK IN A TYPICAL WORK WEEK
HOW MANY OF THESE DO YOU TAKE A PUBLIC BUS?

1. 1
2. 2
3. 3

- 4. 4
- 5. 5
- 6. 6
- 7. 7
- 8. NONE

(PROMPT ONLY IF NO ANSWER)

13. OF THE <<COMMUTE.DAYS>> THAT YOU COMMUTE TO WORK IN A TYPICAL WORK WEEK,
HOW MANY OF THESE DO YOU TAKE THE TRAIN OR RAIL?

- 1. 1
- 2. 2
- 3. 3
- 4. 4
- 5. 5
- 6. 6
- 7. 7
- 8. NONE

(PROMPT ONLY IF NO ANSWER)

14. OF THE <<COMMUTE.DAYS>> THAT YOU COMMUTE TO WORK IN A TYPICAL WORK WEEK,
HOW MANY OF THESE DO YOU TAKE A PRIVATE BUS?

- 1. 1
- 2. 2
- 3. 3
- 4. 4
- 5. 5
- 6. 6
- 7. 7
- 8. NONE

(PROMPT ONLY IF NO ANSWER)

15. OF THE <<COMMUTE.DAYS>> THAT YOU COMMUTE TO WORK IN A TYPICAL WORK WEEK,
HOW MANY OF THESE DO YOU RIDE A BICYCLE?

- 1. 1
- 2. 2
- 3. 3
- 4. 4
- 5. 5
- 6. 6
- 7. 7
- 8. NONE

(PROMPT ONLY IF NO ANSWER)

16. OF THE <<COMMUTE.DAYS>> THAT YOU COMMUTE TO WORK IN A TYPICAL WORK WEEK,
HOW MANY OF THESE DO YOU RIDE A MOTORCYCLE?

- 1. 1
- 2. 2
- 3. 3
- 4. 4
- 5. 5
- 6. 6
- 7. 7

8. NONE

(PROMPT ONLY IF NO ANSWER)

17. OF THE <<COMMUTE.DAYS>> THAT YOU COMMUTE TO WORK IN A TYPICAL WORK WEEK,
HOW MANY OF THESE DO YOU WALK OR JOG?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. NONE

(PROMPT ONLY IF NO ANSWER)

18. ABOUT HOW MANY MILES DO YOU TRAVEL TO WORK ONE-WAY ?

*** SURVEYOR INSTRUCTION: CODE "DON'T KNOW" OR REFUSED AS "999"

19. *** DON'T READ TO RESPONDENT, CODE BASED ON ABOVE QUESTION ****

- | | |
|-------------------|-----------------------|
| 1. 0-3.5 MILES | 4. 20.5 PLUS MILES |
| 2. 3.6-7.5 MILES | 5. DON'T KNOW/REFUSED |
| 3. 7.6-20.5 MILES | |

(DON'T READ PRE-CODED RESPONSES)

20. HOW LONG HAVE YOU BEEN RIDING THE BUS ?

SKIP BEFORE Q20 IF Q<12> EQ "8" THEN GO 26

21. MONTHS OR YEARS ?

1. MONTHS
2. YEARS

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q21 GO 26

26. HOW LONG HAVE YOU BEEN TAKING THE TRAIN ?

SKIP BEFORE Q26 IF Q<13> EQ "8" THEN GO 31

27. MONTHS OR YEARS ?

1. MONTHS
2. YEARS

(PROMPT ONLY IF NO ANSWER)

31. HOW LONG HAVE YOU BEEN IN YOUR CURRENT CARPOOL OR VANPOOL?

SKIP BEFORE Q31 IF Q<10> EQ "8"
AND Q<11> EQ "8" THEN GO 42

32. MONTHS OR YEARS ?

1. MONTHS
2. YEARS

(PROMPT ONLY IF NO ANSWER)

33. WITH WHOM DO YOU REGULARY CARPOOL . . . ?

1. HOUSEHOLD MEMBERS
2. NON-HOUSEHOLD RELATIVES
3. CO-WORKERS
4. FRIENDS, ACQUAINTAINCES, NEIGHBORS
5. SOMEONE FROM A MATCHLIST/RIDEGUIDE

(Multiple Response)

(PROMPT ONLY IF NO ANSWER)

34. WAS THIS SOMEONE ORIGINALLY FROM A RIDEGUIDE OR A MATCHLIST OF POTENTIAL CARPOOL OR VANPOOL PARTNERS ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP BEFORE Q34. IF Q<33> NE "3"
AND Q<33> NE "4" THEN GO 35

35. ARE THE HOUSEHOLD MEMBER(S) YOU CARPOOL WITH...?

1. LESS THAN 16 YEARS OLD
2. SIXTEEN YEARS OLD OR OLDER
3. BOTH

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP BEFORE Q35 IF Q<33> NE "1" THEN GO 36

36. HOW DO YOU LINK UP WITH YOUR CAR/VANPOOL PARTNER(S) ?

1. WHOEVER DRIVES, PICKS UP THE OTHER(S) AT HOME
2. WHOEVER IS NOT DRIVING, DRIVES TO THE DRIVERS HOME
3. EVERYBODY DRIVES TO A CENTRAL LOCATION (i.e., A PARK & RIDE LOT)
4. WE LIVE CLOSE ENOUGH THAT WE CAN WALK/BIKE TO EACH OTHERS HOMES
5. I GET DROPPED OFF BY SOMEONE IN MY HOUSEHOLD
6. OTHER
9. REFUSED/DON'T KNOW

*** SURVEYOR INSTRUCTION: IF ARRANGEMENT VARIES FROM DAY TO DAY,
ASK ABOUT THE LAST DAY THEY CAR/VANPOOLED

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP BEFORE Q36 IF Q<33> NE "2"
AND Q<33> NE "3"
AND Q<33> NE "4"
AND Q<33> NE "5" THEN GO 41

41. INCLUDING YOURSELF, HOW MANY PEOPLE IN TOTAL ARE USUALLY IN
THE CAR/VAN WITH YOU ?

- | | |
|--------|--------------------|
| 1. 1 | 11. 11 |
| 2. 2 | 12. 12 |
| 3. 3 | 13. 13 |
| 4. 4 | 14. 14 |
| 5. 5 | 15. 15 |
| 6. 6 | 16. OTHER |
| 7. 7 | |
| 8. 8 | |
| 9. 9 | |
| 10. 10 | (OTHER LINE = 416) |

*****SURVEYOR NOTE: DO NOT ENTER RESPONSES #1****

(PROMPT ONLY IF NO ANSWER)

42. HOW DID YOU GET TO WORK BEFORE YOU BEGAN TO <<MODE/RIDESHARE>> ?

- | | |
|---------------------|------------------------|
| 1. DROVE ALONE | 7. BICYCLED |
| 2. CARPOOLED | 8. MOTORCYCLED |
| 3. VANPOOLED | 9. WALKED/JOGGED |
| 4. RODE THE BUS | 10. DID NOT WORK |
| 5. TOOK THE TRAIN | 11. OTHER |
| 6. TOOK PRIVATE BUS | 99. DON'T KNOW-REFUSED |

SKIP BEFORE Q42: IF BUS/BICYCLE/WALK/TRAIN/CARPOOL/VANPOOL (Q20-Q32)
ALL GT 1 YEAR GO 44

SKIP BEFORE Q42: IF Q9 PLUS Q16 = Q8 THEN GO 44 (OTHER LINE = 302)

(Multiple Response)

(PROMPT ONLY IF NO ANSWER)

43. WHAT MOTIVATED YOU TO BEGIN TO <<MODE/RIDESHARE>> ?

- | | |
|---|------------------------|
| 1. CO-WORKER SUGGESTED IT | 15. OTHER |
| 2. EMPLOYER/SUPERVISOR SUGGESTED | 99. DON'T KNOW/REFUSED |
| 3. I WAS OFFERED INCENTIVES/PRIZES/BENEFITS | |
| 4. BETTER PARKING | |
| 5. ADVERTISING SUGGESTED IT | |
| 6. GOT TIRED OF DRIVING ALONE | |
| 7. FOUND SOMEONE LIVING AND WORKING CLOSE BY | |
| 8. SOMEBODY HELPED ME SET IT UP | |
| 9. SOMEBODY CALLED ME AND SUGGESTED IT | |
| 10. RIDESHARE WEEK | |
| 11. TO REDUCE POLLUTION/SMOG/HELP THE ENVIRONMENT | |
| 12. TO SAVE MONEY/GAS | |
| 13. CAR PROBLEMS | |
| 14. GOT NEW OPTIONS-NEW BUS ROUTE/NEW TRAINS | (OTHER LINE = 420) |

(Multiple Response)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q43 GO 62

44. AT SOME TIME IN THE PAST 12 MONTHS, HAVE YOU REGULARLY CARPOOLED,
VANPOOLED, OR TAKEN A BUS OR TRAIN TO WORK ?

1. YES

- 2. NO
- 9. REFUSED/DON'T KNOW

*** SURVEYOR INSTRUCTION: IF ASKED, "REGULARLY" IS AT LEAST ONCE PER WEEK

(PROMPT ONLY IF NO ANSWER)

SKIP BEFORE Q44 IF Q<10> LT "8" THEN GO 62
SKIP BEFORE Q44 IF Q<11> LT "8" THEN GO 62
SKIP BEFORE Q44 IF Q<12> LT "8" THEN GO 62
SKIP BEFORE Q44 IF Q<13> LT "8" THEN GO 62
SKIP BEFORE Q44 IF Q<14> LT "8" THEN GO 62
SKIP BEFORE Q44 IF Q<15> LT "8" THEN GO 62
SKIP BEFORE Q44 IF Q<17> LT "8" THEN GO 62
SKIP AFTER Q44 IF Q<44> NE "1" THEN GO 46

45. WHAT MADE YOU STOP ?

- | | |
|---------------------------|--|
| 1. WORK SCHEDULE CHANGED | 8. TOO MUCH MONEY |
| 2. MOVED | 9. BUS ROUTE CHANGED |
| 3. COMPANY RELOCATED | 10. NEEDED VEHICLE AT/AFTER WORK |
| 4. CHANGED JOB/WORK SITE | 11. BECAME UNRELIABLE |
| 5. OTHER RIDESHARERS QUIT | 12. GOT A CAR/GOT CAR FIXED |
| 6. TOOK TOO MUCH TIME | 13. DIDN'T GET ALONG W/OTHER RIDESHARERS |
| 7. TOO STRESSFUL | 14. STOPPED GETTING MONEY FOR IT |
| | 15. OTHER |
| | 99. DON'T KNOW / REFUSED |

***SURVEYOR NOTE: PROBE AND CODE ALL THAT APPLY (OTHER LINE = 390)

(Multiple Response)

(DON'T READ PRE-CODED RESPONSES)

46. WOULD YOU CONSIDER COMMUTING BY CARPOOL FOR 1 OR 2 DAYS A WEEK
TO SEE IF YOU LIKE IT ?

- 1. YES
- 2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q46 IF Q<46> EQ "2" THEN GO 48

47. WOULD THIS BE SOMETHING YOU WOULD DEFINITELY TRY, OR SOMETHING YOU MIGHT
TRY ?

- 1. DEFINITELY
- 2. MIGHT
- 3. NOT TRY
- 9. REFUSED / DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

48. WOULD YOU CONSIDER COMMUTING BY VANPOOL FOR 1 OR 2 DAYS A WEEK TO
SEE IF YOU LIKE IT ?

- 1. YES
- 2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP BEFORE Q48 IF Q<19> LT "4" THEN GO 50
SKIP AFTER Q48 IF Q<48> EQ "2" THEN GO 50

49. WOULD THIS BE SOMETHING YOU WOULD DEFINITELY TRY, OR SOMETHING YOU MIGHT TRY ?

1. DEFINITELY
2. MIGHT
3. NOT TRY
9. REFUSED / DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

50. WOULD YOU CONSIDER COMMUTING BY BUS FOR 1 OR 2 DAYS A WEEK TO SEE IF YOU LIKE IT ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q50 IF Q<50> EQ "2" THEN GO 52

51. WOULD THIS BE SOMETHING YOU WOULD DEFINITELY TRY, OR SOMETHING YOU MIGHT TRY ?

1. DEFINITELY
2. MIGHT
3. NOT TRY
9. REFUSED / DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

52. WOULD YOU CONSIDER COMMUTING BY TRAIN/RAIL FOR 1 OR 2 DAYS A WEEK TO SEE IF YOU LIKE IT ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q52 IF Q<52> EQ "2" THEN GO 54

53. WOULD THIS BE SOMETHING YOU WOULD DEFINITELY TRY, OR SOMETHING YOU MIGHT TRY ?

1. DEFINITELY
2. MIGHT
3. NOT TRY
9. REFUSED / DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

54. WOULD YOU CONSIDER COMMUTING BY BICYCLE FOR 1 OR 2 DAYS A WEEK TO SEE IF YOU LIKE IT ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP BEFORE Q54 IF Q<19> NE "1"
AND Q<19> NE "2"
AND Q<19> NE "5" THEN GO 56
SKIP AFTER Q54 IF Q<54> EQ "2" THEN GO 56

55. WOULD THIS BE SOMETHING YOU WOULD DEFINITELY TRY, OR SOMETHING YOU MIGHT TRY ?

1. DEFINITELY
2. MIGHT
3. NOT TRY
9. REFUSED / DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

56. WOULD YOU CONSIDER WALKING OR JOGGING FOR 1 OR 2 DAYS A WEEK TO SEE IF YOU LIKE IT ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP BEFORE Q56 IF Q<19> NE "1" THEN GO 58
SKIP AFTER Q56 IF Q<56> EQ "2" THEN GO 58

57. WOULD THIS BE SOMETHING YOU WOULD DEFINITELY TRY, OR SOMETHING YOU MIGHT TRY ?

1. DEFINITELY
2. MIGHT
3. NOT TRY
9. REFUSED / DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

58. WHY WOULDN'T YOU CONSIDER CARPOOLING ?

- | | |
|--|--|
| 1. NEED MY CAR AT WORK | 13. LIKE TO BE INDEPENDENT OF OTHER PEOPLE |
| 2. NEED MY CAR BEFORE/AFTER WORK | 14. WORK SCHEDULE TOO IRREGULAR |
| 3. WANT TO HAVE MY CAR IN CASE OVERTIME OR UNFORSEEN EMERGENCY | 15. TOO EXPENSIVE |
| 4. IT MIGHT NOT BE SAFE | 16. DON'T KNOW OF ANYONE TO CARPOOL WITH |
| 5. DON'T TRUST IT WOULD BE RELIABLE | 17. OTHER |
| 6. IT WOULD TAKE TOO LONG | 99. DON'T KNOW/REFUSED |
| 7. DISTANCE TOO SHORT | |
| 8. DISTANCE TOO LONG | |
| 9. HAVE HAD A BAD EXPERIENCE W/CP | |
| 10. DON'T SEE WHY I SHOULDN'T DRIVE MY CAR/TOO MUCH HASSLE | |
| 11. DON'T LIKE TO RIDE WITH STRANGERS | |
| 12. LIKE TO BE ALONE | (OTHER LINE = 305) |

(Multiple Response)

(PROMPT ONLY IF NO ANSWER)

SKIP BEFORE Q58 IF Q<46> NE "2"
AND Q<47> NE "3" THEN GO 59

59. WHY WOULDN'T YOU CONSIDER VANPOOLING ?

- | | |
|--|--|
| 1. NEED CAR AT WORK | 12. LIKE TO BE ALONE DURING COMMUTE |
| 2. NEED CAR BEFORE/AFTER WORK | 13. LIKE TO BE INDEPENDENT OF OTHER PEOPLE |
| 3. WANT CAR IN CASE OF EMERGENCY /OVERTIME | 14. WORK SCHEDULE TOO IRREGULAR |
| 4. IT MIGHT NOT BE SAFE | 15. TOO EXPENSIVE |
| 5. DON'T TRUST IT WOULD BE RELIABLE | 16. DON'T KNOW ANYONE TO VANPOOL WITH |
| 6. IT WOULD TAKE TOO LONG | 17. NO CONVENIENT PICK-UP /DROP-OFF NEAR |
| 7. DISTANCE TOO SHORT | 18. OTHER |
| 8. DISTANCE TOO LONG | 99. DON'T KNOW/REFUSED (OTHER LINE = 306) |
| 9. HAVE HAD A BAD EXPERIENCE WITH VANPOOLING | |
| 10. DON'T SEE WHY I SHOULDN'T DRIVE MY CAR/TOO MUCH HASSLE | |
| 11. DON'T LIKE TO RIDE WITH STRANGERS | |

(Multiple Response)

(PROMPT ONLY IF NO ANSWER)

SKIP BEFORE Q59 IF Q<48> NE "2"
AND Q<49> NE "3" THEN GO 60

60. WHY WOULDN'T YOU CONSIDER TAKING THE BUS ?

- | | |
|--|---|
| 1. NEED MY CAR AT WORK | 16. NO BUS AVAILABLE/INCONVENIENT BUS STOPS OR SCHEDULE |
| 2. NEED CAR BEFORE/AFTER WORK | 17. TOO UNCOMFORTABLE/CROWDED |
| 3. WANT CAR FOR EMERGENCY/OVERTIME | 18. TOO MUCH TIME BETWEEN BUSES |
| 4. IT MIGHT NOT BE SAFE | 19. TOO MANY BUS TRANSFERS |
| 5. DON'T TRUST IT WOULD BE RELIABLE | 20. DON'T KNOW HOW |
| 6. IT WOULD TAKE TOO LONG | 21. BUSES TOO DIRTY |
| 7. DISTANCE TOO SHORT | 22. DON'T FEEL SAFE ON BUS |
| 8. DISTANCE TOO LONG | 23. DON'T FEEL SAFE GETTING TO/FROM/OR AT BUS STOP |
| 9. HAVE HAD A BAD EXPERIENCE | 24. OTHER (OTHER LINE = 307) |
| 10. TOO MUCH HASSLE | 99. DON'T KNOW/REFUSED |
| 11. DON'T LIKE TO DRIVE WITH STRANGERS | 98. NOT ASKED |
| 12. LIKE TO BE ALONE DURING COMMUTE | NOTE: WILL BE CODED AS 98 IF NOT ASKED |
| 13. LIKE TO BE INDEPENDENT OF OTHERS | |
| 14. WORK SCHEDULE TOO IRREGULAR | |
| 15. TOO EXPENSIVE | |

(Multiple Response)

(PROMPT ONLY IF NO ANSWER)

SKIP BEFORE Q60 IF Q<50> NE "2"
AND Q<51> NE "3" THEN GO 61

61. WHY WOULDN'T YOU CONSIDER RIDING THE TRAIN ?

- | | |
|--|---|
| 1. NEED CAR AT WORK | 12. LIKE TO BE ALONE DURING COMMUTE |
| 2. NEED CAR BEFORE/AFTER WORK | 13. LIKE TO BE INDEPENDENT OF OTHER PEOPLE |
| 3. WANT CAR IN CASE OF OVERTIME /EMERGENCY | 14. WORK SCHEDULE TOO IRREGULAR |
| 4. IT MIGHT NOT BE SAFE | 15. NO TRAIN AVAILABLE/INCONVENIENT STOPS/SCHEDULES |
| 5. DON'T TRUST IT WOULD BE RELIABLE | 16. TOO UNCOMFORTABLE/CROWDED |
| 6. IT WOULD TAKE TOO LONG | 17. TOO MUCH TIME BETWEEN TRAINS |
| 7. DISTANCE TOO SHORT | |
| 8. DISTANCE TOO LONG | |
| 9. HAVE HAD A BAD EXPERIENCE WITH | |

TRAINS	18. WOULD HAVE TO CHANGE TRAINS/BUSSES
10. TOO MUCH HASSLE	19. DON'T KNOW HOW
11. DON'T LIKE TO RIDE	20. TRAINS TOO DIRTY
WITH STRANGERS	21. OTHER
98. NOT ASKED	99. DON'T KNOW/REFUSED (OTHER LINE = 308)

(Multiple Response)

(PROMPT ONLY IF NO ANSWER)

SKIP BEFORE Q61 IF Q<52> NE "2"
AND Q<53> NE "3" THEN GO 62

62. IS THERE A BUS THAT YOU COULD TAKE TO GET TO WORK ?

- 1. YES
- 2. NO
- 8. REFUSED
- 9. DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP BEFORE Q62 IF Q<12> NE "8" THEN GO 63
SKIP BEFORE Q62 IF Q<60> EQ "16" THEN GO 63

63. DURING THE LAST WEEK DID YOU USE A FREEWAY TO TRAVEL TO WORK ?

- 1. YES
- 2. NO
- 9. REFUSED/DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q63 IF Q<63> NE "1" THEN GO 72

64. IS THERE A SPECIAL CARPOOL LANE THAT CAN BE USED ONLY BY CARPOOLS,
VANPOOLS OR BUSES ON THE FREEWAY THAT YOU USE TO TRAVEL TO OR
FROM WORK (DOES NOT INCLUDE METERED ON-RAMPS) ?

- 1. YES
- 2. NO
- 9. DON'T KNOW/REFUSED

SKIP AFTER Q64: IF Q8 = Q9 THEN GO 69

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q64 IF Q<64> EQ "1" THEN GO 69

65. DURING LAST WEEK DID YOU USE THIS CARPOOL LANE WHEN GOING TO WORK ?

- 1. YES
- 2. NO
- 9. REFUSED/DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q65 IF Q<65> NE "1" THEN GO 68

66. DOES THE CARPOOL LANE SAVE YOU TIME IN GETTING TO WORK ?

1. YES
2. NO
9. REFUSED/DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q66 IF Q<66> NE "1" THEN GO 69

67. HOW MANY MINUTES DOES THE CARPOOL LANE SAVE YOU ?

SKIP AFTER Q67 GO 70

68. WHY DON'T YOU USE THE CARPOOL LANE ?

1. SAFETY CONCERNS
2. PREFER TO DRIVE ALONE
3. NOT ENOUGH PEOPLE IN CARPOOL TO QUALIFY
4. WOULD LIKE TO CARPOOL; CAN'T FIND OTHERS TO CARPOOL WITH
5. PHYSICAL LAYOUT MAKES GETTING IN AND OUT OF LANE DIFFICULT
6. DOES NOT SAVE ME ENOUGH TIME
7. TRAVEL DISTANCE ON FREEWAY TOO SHORT TO MAKE USING LANE WORTHWHILE
8. OTHER
9. DON'T KNOW/REFUSED (OTHER LINE = 309)

(Multiple Response)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

69. WOULD THE AVAILABILITY OF CARPOOL LANES ON A FREEWAY THAT YOU CAN USE TO TRAVEL TO OR FROM WORK ENCOURAGE YOU TO CARPOOL, VANPOOL OR TAKE THE BUS ?

1. YES
2. NO
9. REFUSED/DON'T KNOW

(PROMPT ONLY IF NO ANSWER)

70. DURING YOUR TYPICAL COMMUTE, WOULD YOU SAY THE FLOW OF TRAFFIC ON THE FREEWAYS YOU TRAVEL IS . . . ?

1. ALWAYS BAD
2. MORE OFTEN BAD
3. MIXED
4. MORE OFTEN GOOD
5. ALWAYS GOOD
9. REFUSED/DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

71. COMPARED TO YOUR COMMUTE A YEAR AGO WOULD YOU SAY THE FLOW OF TRAFFIC ON THE FREEWAYS NOW IS . . . ?

1. WORSE
2. THE SAME
3. OR BETTER
8. DON'T KNOW
9. REFUSED

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

 72. DURING YOUR TYPICAL COMMUTE, WOULD YOU SAY THE FLOW OF TRAFFIC ON
 THE SURFACE STREETS YOU TRAVEL IS . . . ?
 1. ALWAYS BAD
 2. MORE OFTEN BAD
 3. MIXED
 4. MORE OFTEN GOOD
 5. ALWAYS GOOD
 9. REFUSED/DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

 73. COMPARED TO YOUR COMMUTE A YEAR AGO WOULD YOU SAY THE FLOW OF
 TRAFFIC ON SURFACE STREETS NOW IS . . . ?
 1. WORSE
 2. THE SAME
 3. OR BETTER
 8. DON'T KNOW
 9. REFUSED

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

 74. ON A SCALE FROM "1" TO "9", WITH "1" BEING THE LEAST SATISFACTORY
 AND "9" BEING THE MOST SATISFACTORY, HOW WOULD YOU RATE YOUR CURRENT
 COMMUTE OVERALL ?
 1. 1
 2. 2
 3. 3
 4. 4
 5. 5
 6. 6
 7. 7
 8. 8
 9. 9
 99. DON'T KNOW/REFUSED

 ***SURVEYOR NOTE: FOR THE NEXT GROUP OF QUESTIONS, IF THE
 RESPONDENT DID NOT WORK TODAY, ASK ABOUT THE LAST DAY
 THEY TRAVELED TO WORK.***

75. TO GET A BETTER IDEA OF DAILY TRIP ACTIVITY, I'D LIKE TO
 ASK YOU ABOUT TRAVEL TODAY. AT WHAT TIME DID YOU LEAVE THE
 HOUSE TODAY TO GO TO WORK ?

***SURVEYOR'S NOTE: DENOTE AM OR PM USING THE FOLLOWING FORMAT: 8:00 AM

 76. ON YOUR WAY TO WORK, DID YOU STOP ANYWHERE, NO MATTER HOW BRIEFLY ?

- 1. YES
- 2. NO
- 9. REFUSED/DON'T KNOW

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q76 IF Q<76> GT "1" THEN GO 96

77. HOW MANY STOPS DID YOU MAKE ?

78. WHAT WAS THE PURPOSE OF THIS/THESE STOP(S) ? (KEEP ASKING
"WERE THERE ANY OTHER STOPS" UNTIL RESPONDENT SAYS "NO")

- | | |
|---------------------------------|---|
| 1. TOOK CHILD TO DAYCARE | 8. VISITED FRIENDS/RELATIVES-SOCIALIZED |
| 2. TOOK CHILD TO SCHOOL | 9. WENT SHOPPING/BOUGHT GROCERIES |
| 3. PICKED UP OR DROPPED CAR | 10. PICKED UP/DELIVERED GOODS |
| VANPOOLER/CHANGED TRAVEL MODE | 11. WENT TO MEETINGS |
| 4. WENT TO BANK | 12. BOUGHT GASOLINE |
| 5. WENT TO ENTERTAINMENT | 13. WENT TO SECOND JOB |
| /RECREATION | 14. POST OFFICE |
| 6. WENT TO CLEANERS/HAIRDRESSER | 15. WORK RELATED STOP |
| DOCTOR/DENTIST | 16. OTHER (OTHER LINE = 310) |
| 7. WENT TO EAT | 99. REFUSED/DON'T KNOW |

(Multiple Response)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

79. ON AVERAGE, HOW MANY DAYS A WEEK DO YOU STOP FOR <<STOP.1>> ON THE WAY TO
WORK ?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. LESS THAN ONE TIME PER WEEK ON AVERAGE

(PROMPT ONLY IF NO ANSWER)

80. ON AVERAGE, HOW MANY DAYS A WEEK DO YOU STOP FOR <<STOP.2>> ON THE WAY TO
WORK ?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. LESS THAN ONE TIME PER WEEK ON AVERAGE

SKIP BEFORE Q80 IF Q78 NUMBER OF RESPONSES < "2" THEN GO 96

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

81. ON AVERAGE, HOW MANY DAYS A WEEK DO YOU STOP FOR <<STOP.3>> ON THE WAY TO
WORK ?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6

7. 7
8. LESS THAN ONE TIME PER WEEK ON AVERAGE

SKIP BEFORE Q81 IF Q78 NUMBER OF RESPONSES < "3" THEN GO 96

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

82. ON AVERAGE, HOW MANY DAYS A WEEK DO YOU STOP FOR <<STOP.4+>> ON THE WAY T
WORK ?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. LESS THAN ONE TIME PER WEEK ON AVERAGE

SKIP BEFORE Q82 IF Q78 NUMBER OF RESPONSES < "4" THEN GO 96

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

96. WHAT TIME DID YOU ARRIVE AT WORK TODAY ?

***SURVEYOR NOTE: DENOTE AM OR PM USING THE FOLLOWING FORMAT: 8:00 AM

***SURVEYOR NOTE: IF MORE THAN ONCE IN DAY, THEN FIRST TIME

97. WHAT TIME DID YOU LEAVE WORK TODAY TO GO HOME ?

***SURVEYOR NOTE: DENOTE AM OR PM USING THE FOLLOWING FORMAT: 8:00 AM

***SURVEYOR NOTE: IF MORE THAN ONCE IN DAY, THEN LAST TIME

98. ON YOUR WAY HOME DID YOU STOP ANYWHERE, NO MATTER HOW BRIEFLY ?

1. YES
2. NO
9. REFUSED/DON'T KNOW

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q98 IF Q<98> GT "1" THEN GO 118

99. HOW MANY STOPS DID YOU MAKE ?

100. WHAT WAS THE PURPOSE OF THIS/THESE STOP(S) ?

1. PICKED UP CHILD FROM DAYCARE 16. OTHER
2. PICKED UP CHILD FROM SCHOOL 99. REFUSED/DON'T KNOW
3. PICKED UP OR DROPPED OFF CAR/VANPOOLER/CHANGED TRAVEL MODE
4. WENT TO BANK
5. WENT TO ENTERTAINMENT/RECREATION
6. WENT TO CLEANERS/HAIRDRESSER/DOCTOR/DENTIST
7. WENT TO EAT
8. VISITED FRIENDS/RELATIVES-SOCIALIZED
9. WENT SHOPPING/BOUGHT GROCERIES
10. PICKED UP/DELIVERED GOODS

11.WENT TO MEETINGS
12.BUGHT GASOLINE
13.WENT TO A SECOND JOB
14.POST OFFICE
15.WORK RELATED STOP (OTHER LINE = 311)

(Multiple Response)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

101. ON AVERAGE, HOW MANY DAYS A WEEK DO YOU STOP ON THE WAY HOME FOR
<<STOP2.1>> ?

- 1. 1
- 2. 2
- 3. 3
- 4. 4
- 5. 5
- 6. 6
- 7. 7
- 8. LESS THAN ONCE PER WEEK

(PROMPT ONLY IF NO ANSWER)

102. ON AVERAGE, HOW MANY DAYS A WEEK DO YOU STOP ON THE WAY HOME FOR
<<STOP2.2>> ?

- 1. 1
- 2. 2
- 3. 3
- 4. 4
- 5. 5
- 6. 6
- 7. 7
- 8. LESS THAN ONCE PER WEEK

SKIP BEFORE Q102 IF NUMBER OF RESPONSES FOR Q100 < "2" THEN GO 118

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

103. ON AVERAGE, HOW MANY DAYS A WEEK DO YOU STOP ON THE WAY HOME FOR
<<STOP2.3>> ?

- 1. 1
- 2. 2
- 3. 3
- 4. 4
- 5. 5
- 6. 6
- 7. 7
- 8. LESS THAN ONCE PER WEEK

SKIP BEFORE Q103 IF NUMBER OF RESPONSES FOR Q100 < "3" THEN GO 118

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

104. ON AVERAGE, HOW MANY DAYS A WEEK DO YOU STOP ON THE WAY HOME FOR
<<STOP2.4+>> ?

- 1. 1

2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. LESS THAN ONCE PER WEEK

SKIP BEFORE Q104 IF NUMBER OF RESPONSES FOR Q100 < "4" THEN GO 118

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

118. WHAT TIME DID YOU ARRIVE HOME FROM WORK TODAY ?

***SURVEYOR NOTE: DENOTE AM OR PM USING THE FOLLOWING FORMAT: 8:00 PM

NOW WE'RE GOING TO SWITCH FROM YOUR MOST RECENT TRIP AND ASK YOU ABOUT
YOUR TYPICAL OR USUAL TRIP.

119. ABOUT HOW MANY MINUTES DOES IT USUALLY TAKE YOU TO TRAVEL TO WORK ?

SURVEYOR NOTE: RECORD TIME IN MINUTES, NOT HOURS

121. ABOUT HOW MANY MINUTES DOES IT USUALLY TAKE YOU TO TRAVEL
HOME FROM WORK ?

*** SURVEYOR NOTE: RECORD TIME IN MINUTES, NOT HOURS ***

122. DO YOU FEEL YOUR COMMUTE TIME IS LONGER NOW THAN IT WAS ONE YEAR AGO ?

1. YES
2. NO
8. DON'T KNOW
9. REFUSED

(PROMPT ONLY IF NO ANSWER)

125. HOW MANY DAYS A WEEK DO YOU NEED YOUR CAR AT WORK FOR
EITHER BUSINESS OR PERSONAL TRIPS DURING WORK HOURS ?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. NONE

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

126. DO YOU PAY FOR PARKING AT YOUR WORK SITE ?

1. YES, PAY TOTALLY
2. YES, PAY PARTIALLY
3. NO, RECEIVE FREE PARKING
9. REFUSED/DON'T KNOW

SURVEYOR'S NOTE: DENOTE DIFFERENCE OF TOTALLY OR PARTIALLY

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q126 IF Q<126> GE "3" THEN GO 130

127. HOW MUCH DO YOU PAY FOR PARKING ?

***SURVEYOR NOTE: IN THIS FORMAT "#.##" OR "##.##" OR "###.##"

128. DAY/WEEK/MONTH

1. DAY
2. WEEK
3. MONTH

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

130. DURING THE LAST WEEK DID YOU USE A PARK-AND-RIDE LOT WHEN YOU TRAVELED TO WORK ?

1. YES
2. NO
9. REFUSED/DON'T KNOW

(PROMPT ONLY IF NO ANSWER)

131. AS PART OF YOUR EMPLOYMENT, DO YOU HAVE THE OPPORTUNITY TO WORK AT HOME INSTEAD OF GOING TO YOUR REGULAR PLACE OF WORK ?

1. YES
2. NO
9. REFUSED/DON'T KNOW

***SURVEYOR'S NOTE: WORKING AT HOME AFTER HOURS DOES NOT QUALIFY

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q131 IF Q<131> NE "1" THEN GO 133

132. APPROXIMATELY HOW MANY DAYS PER MONTH DO YOU WORK AT HOME INSTEAD OF AT YOUR REGULAR PLACE OF WORK ?

***SURVEYOR'S NOTE: ASSUME ONE MONTH = FOUR WEEKS (I.E. 28 DAYS)

133. DOES YOUR EMPLOYER OFFER FLEXIBLE WORK HOURS ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q133 IF Q<133> NE "1" THEN GO 135

134. ARE YOU CURRENTLY ON THIS FLEXIBLE WORK SCHEDULE ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

135. DOES YOUR EMPLOYER OFFER A 4/40 WORK WEEK (FOUR DAY WORK WEEK WORKING
10 HOURS A DAY) ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q135 IF Q<135> NE "1" THEN GO 137

136. ARE YOU CURRENTLY ON THIS 4/40 WORK WEEK ?

1. YES
2. NO

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

137. DOES YOUR EMPLOYER OFFER A 9/80 WORK WEEK (9 HOUR DAY WITH A DAY OFF
EVERY OTHER WEEK) ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q137 IF Q<137> NE "1" THEN GO 139

138. ARE YOU CURRENTLY ON THIS 9/80 WORK WEEK SCHEDULE ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

139. DOES YOUR EMPLOYER OFFER A 3/36 WORK WEEK (THREE 12-HOUR WORK DAYS) ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q139 IF Q<139> NE "1" THEN GO 143

140. ARE YOU CURRENTLY ON THIS 3/36 WORK WEEK SCHEDULE ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

143. DOES YOUR EMPLOYER ASSIST IN FORMING CARPOOLS OR VANPOOLS ?

1. YES
2. NO
9. DON'T KNOW REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q143 IF Q<143> NE "1" THEN GO 146

 144. HAVE YOU USED THEIR ASSISTANCE IN FORMING A CARPOOL OR VANPOOL ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q144 IF Q<144> EQ "2" THEN GO 146

 145. HAS THEIR ASSISTANCE IN HELPING FORM CARPOOLS OR VANPOOLS INFLUENCED HOW YOU GET TO WORK ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

 146. DOES YOUR EMPLOYER PROVIDE RIDESHARE INFORMATION ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q146 IF Q<146> NE "1" THEN GO 149

 147. HAVE YOU USED THEIR RIDESHARE INFORMATION ?

1. YES
2. NO

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q147 IF Q<147> EQ "2" THEN GO 149

 148. HAS PROVIDING YOU WITH RIDESHARE INFORMATION INFLUENCED HOW YOU GET TO WORK ?

1. YES
2. NO

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

 149. DOES YOUR EMPLOYER PROVIDE PREFERRED PARKING SPACES FOR RIDESHARING ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q149 IF Q<149> NE "1" THEN GO 152

 150. HAVE YOU USED THE PREFERRED PARKING SPACES ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q150 IF Q<150> EQ "2" THEN GO 152

151. HAS PROVIDING YOU WITH PREFERRED PARKING SPACES INFLUENCED HOW
YOU GET TO WORK ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

152. DOES YOUR EMPLOYER PROVIDE FREE OR LOW COST PARKING FOR RIDESHARERS ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q152 IF Q<152> NE "1" THEN GO 155

153. HAVE YOU USED THE FREE OR LOW COST PARKING FOR RIDESHARERS ?

1. YES
2. NO

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q153 IF Q<153> EQ "2" THEN GO 155

154. HAS PROVIDING YOU WITH FREE OR LOW COST PARKING SPACES INFLUENCED HOW
YOU GET TO WORK ?

1. YES
2. NO

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

155. DOES YOUR EMPLOYER GIVE MONEY TO THOSE WHO RIDESHARE ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q155 IF Q<155> NE "1" THEN GO 159

156. HOW MUCH MONEY PER MONTH ?

*** SURVEYOR NOTE: IN THIS FORMAT "\$.## OR ##.## OR ###.##"

157. HAVE YOU RECEIVED ANY MONEY FROM YOUR EMPLOYER AS PART OF THE RIDESHARE
PROGRAM ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q157 IF Q<157> EQ "2" THEN GO 159

158. HAS RECEIVING MONEY FROM YOUR EMPLOYER FOR RIDESHARING INFLUENCED HOW YOU GET TO WORK ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

159. DOES YOUR EMPLOYER GIVE ALL EMPLOYEES A MONTHLY ALLOTMENT OF MONEY TO REDUCE COMMUTING COSTS ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q159 IF Q<159> NE "1" THEN GO 162

160. HAVE YOU RECEIVED A MONTHLY ALLOTMENT OF MONEY FROM YOUR EMPLOYER TO REDUCE COMMUTING COSTS ?

1. YES
2. NO

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q160 IF Q<160> EQ "2" THEN GO 162

161. HAS RECEIVING A MONTHLY ALLOTMENT OF MONEY FROM YOUR EMPLOYER TO REDUCE COMMUTING COSTS INFLUENCED HOW YOU GET TO WORK ?

1. YES
2. NO

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

162. DOES YOUR EMPLOYER SELL BUS OR RAIL PASSES ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q162 IF Q<162> NE "1" THEN GO 165

163. HAVE YOU BOUGHT A BUS OR RAIL PASS THROUGH YOUR EMPLOYER ?

1. YES
2. NO

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q163 IF Q<163> EQ "2" THEN GO 165

 164. HAS SELLING BUS OR RAIL PASSES INFLUENCED HOW YOU GET TO WORK ?

 1. YES
 2. NO

 (PROMPT ONLY IF NO ANSWER)

 165. DOES YOUR EMPLOYER PROVIDE BUS OR RAIL ROUTES AND SCHEDULES
 INFORMATION ?

 1. YES
 2. NO
 9. DON'T KNOW/REFUSED

 (PROMPT ONLY IF NO ANSWER)

 SKIP AFTER Q165 IF Q<165> NE "1" THEN GO 168

 166. HAVE YOU USED THE BUS OR RAIL ROUTES AND SCHEDULES INFORMATION ?

 1. YES
 2. NO

 (PROMPT ONLY IF NO ANSWER)

 SKIP AFTER Q166 IF Q<166> EQ "2" THEN GO 168

 167. HAS PROVIDING BUS OR RAIL ROUTES AND SCHEDULES INFORMATION
 INFLUENCED HOW YOU GET TO WORK ?

 1. YES
 2. NO

 (PROMPT ONLY IF NO ANSWER)

 168. DOES YOUR EMPLOYER REGISTER EMPLOYEES WITH A RIDESHARE AGENCY ?

 1. YES
 2. NO
 9. DON'T KNOW/REFUSED

 (PROMPT ONLY IF NO ANSWER)

 SKIP AFTER Q168 IF Q<168> NE "1" THEN GO 171

 169. HAVE YOU REGISTERED WITH A RIDESHARE AGENCY THROUGH YOUR EMPLOYER ?

 1. YES
 2. NO

 (PROMPT ONLY IF NO ANSWER)

 SKIP AFTER Q169 IF Q<169> EQ "2" THEN GO 171

 170. HAS REGISTERING WITH A RIDESHARE AGENCY INFLUENCED HOW YOU GET
 TO WORK ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

171. DOES YOUR EMPLOYER HAVE CONTESTS/PRIZES FOR RIDESHARERS ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q171 IF Q<171> NE "1" THEN GO 174

172. HAVE YOU ENTERED A CONTEST WITH PRIZES FOR RIDESHARERS ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q172 IF Q<172> EQ "2" THEN GO 174

173. HAS ENTERING RIDESHARE CONTESTS OR RECEIVING PRIZES INFLUENCED HOW YOU GET TO WORK ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

174. DOES YOUR EMPLOYER ALLOW RIDESHARERS THE USE OF A COMPANY CAR DURING THE DAY TO RUN PERSONAL ERRANDS ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q174 IF Q<174> NE "1" THEN GO 177

175. HAVE YOU USED A COMPANY CAR TO RUN PERSONAL ERRANDS ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q175 IF Q<175> EQ "2" THEN GO 177

176. HAS THE USE OF A COMPANY CAR TO RUN PERSONAL ERRANDS INFLUENCED HOW YOU GET TO WORK ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

177. DOES YOUR EMPLOYER GUARANTEE A RIDE HOME IN CASE OF EMERGENCY ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q177 IF Q<177> NE "1" THEN GO 185

178. HAVE YOU USED THE GUARANTEED RIDE HOME ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

179. HAS THE GUARANTEED RIDE HOME INFLUENCED HOW YOU GET TO WORK ?

1. YES
2. NO

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q179 GO 185

185. WHAT FACTORS DO YOU CONSIDER WHEN CHOOSING YOUR MEANS OF TRANSPORTATION TO WORK ?

- | | |
|--|---|
| 1. COMMUTING COSTS | 12. NOT BEING DEPENDENT ON OTHERS |
| 2. COMFORT/RELAXATION | 13. CONVENIENCE/FLEXIBILITY |
| 3. TRAVEL TIME TO WORK | 14. HAVING VEHICLE AVAILABLE TO TAKE KIDS TO DAYCARE/SCHOOL |
| 4. PRIVACY | 15. INCENTIVES OFFERED BY EMPLOYER |
| 5. ENJOY TALKING TO SOMEONE | 16. OTHER WAYS ARE IMPRACTICAL |
| 6. HAVING VEHICLE DURING WORK | 17. SAVES ENERGY/FUEL |
| 7. HAVING VEHICLE BEFORE/AFTER WORK | 18. RELIABILITY/DEPENDABILITY |
| 8. REDUCING POLLUTION/CLEAN AIR | 19. WORK HOURS/WORK SCHEDULE |
| 9. SAFETY | 20. WANT TO GET HOME AT ANY TIME |
| 10. HAVING NO OTHER WAY TO GET TO WORK | 21. OTHER (OTHER LINE = 362) |
| 11. STRESS | |

*** SURVEYOR NOTE: PROMPT AT LEAST TWICE, "WHAT ELSE" UNTIL "NOTHING"

(Multiple Response)

(PROMPT ONLY IF NO ANSWER)

186. WHAT DO YOU MEAN BY CONVENIENCE AND FLEXIBILITY ?

1. DON'T HAVE TO PLAN OR COORDINATE WITH OTHERS
2. CAN COME AND GO AS I PLEASE
3. ALLOWS ME TO CHANGE PLANS, ADD STOPS ETC. AS I PLEASE
4. RELIABLE AND DEPENDABLE
5. CAN GET HOME IN THE EVENT OF AN EMERGENCY
6. ONLY TIME OF THE DAY TO BE ALONE
7. DON'T HAVE TO GO TO ANOTHER LOCATION
8. FASTEST WAY TO TRAVEL
9. OTHER
99. DON'T KNOW / REFUSED (OTHER LINE = 415)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP BEFORE Q186 IF Q<185> NE "13" THEN GO 187

 187. AMONG THE FACTORS MENTIONED, WHICH ONE IS MOST(SECOND MOST, THIRD MOST)
 IMPORTANT WHEN CHOOSING YOUR MEANS OF TRANSPORTATION TO WORK ?
 1. COMMUTING COSTS 12. NOT BEING DEPENDENT ON OTHER
 2. COMFORT/RELAXATION 13. CONVENIENCE/FLEXIBILITY
 3. TRAVEL TIME TO WORK 14. HAVING VEHICLE AVAILABLE TO
 4. PRIVACY TAKE KIDS TO DAYCARE/SCHOOL
 5. ENJOY TALKING TO SOMEONE 15. INCENTIVES OFFERED BY EMPLOYER
 6. HAVING VEHICLE DURING WORK 16. OTHER WAYS ARE IMPRACTICAL
 7. HAVING VEHICLE BEFORE/AFTER WORK 17. SAVES ENERGY/FUEL
 8. REDUCING POLLUTION/CLEAN AIR 18. RELIABILITY/DEPENDABILITY
 9. SAFETY 19. WORK HOURS/WORK SCHEDULE
 10. HAVING NO OTHER WAY TO GET TO WORK 20. WANT TO GET HOME AT ANY TIME
 11. STRESS 21. OTHER (OTHER LINE = 416)
 ***SURVEYOR NOTE: ASK SEPARATELY FOR 1ST, 2ND AND 3RD MOST IMPORTANT
 SKIP BEFORE Q 187: IF # RESPONSES FOR Q185 EQ "1" THEN GO 188

(Multiple Response)

(PROMPT ONLY IF NO ANSWER)

 188. HAVE YOU EVER CALCULATED THE COST OF YOUR CURRENT COMMUTE ?

1. YES
2. NO
9. REFUSED/DON'T KNOW

(PROMPT ONLY IF NO ANSWER)

 189. HOW MUCH WOULD YOU ESTIMATE IS YOUR CURRENT TOTAL COMMUTE COST
 PER MONTH ?

SURVEYOR NOTE: FORMAT #.## OR ##.## OR ###.##

 190. WHAT DID YOU INCLUDE IN THIS ESTIMATE ?

1. GASOLINE
2. INSURANCE
3. MAINTENANCE/REPAIR
4. PARKING
5. DEPRECIATION
6. OTHER (OTHER LINE = 364)

(Multiple Response)

(PROMPT ONLY IF NO ANSWER)

 191. HOW OFTEN DO YOU FEEL BOTHERED BY TRAFFIC CONGESTION IN COMMUTING TO
 OR FROM WORK, IS IT . . . ?

1. NEVER
2. HARDLY EVER
3. SOMETIMES
4. FAIRLY OFTEN
5. VERY OFTEN
9. DON'T KNOW/REFUSED

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

192. AFTER YOUR COMMUTE TO WORK, HOW OFTEN DO YOU FEEL A NEED TO WIND DOWN AND RELAX BEFORE STARTING WORK ?

1. NEVER
2. HARDLY EVER
3. SOMETIMES
4. FAIRLY OFTEN
5. VERY OFTEN
9. DON'T KNOW/REFUSED

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

193. SOME PEOPLE SAY THAT DEALING WITH TRAFFIC ON THEIR COMMUTE HOME FROM WORK HAS A NEGATIVE EFFECT ON THEIR HOME LIFE. TO WHAT EXTENT IS THIS TRUE FOR YOU ?

1. NOT AT ALL
2. A LITTLE
3. SOMEWHAT
4. QUITE A BIT
5. VERY MUCH
9. DON'T KNOW/REFUSED

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

194. WHEN YOU COMMUTE TO OR FROM WORK AND THE TRAFFIC JAMS UP, DO YOU EVER DECIDE TO CHANGE YOUR USUAL ROUTE AND TAKE AN ALTERNATE ROUTE ?

1. YES
2. NO
9. REFUSED/DON'T KNOW

(PROMPT ONLY IF NO ANSWER)

195. IF RADIO TRAFFIC REPORTS INCLUDED ALTERNATE ROUTE INFORMATION IN THEIR BROADCASTS, HOW LIKELY WOULD YOU BE TO USE AN ALTERNATE ROUTE ? WOULD YOU BE . . . ?

1. VERY LIKELY
2. SOMEWHAT LIKELY
3. MIXED
4. SOMEWHAT UNLIKELY
5. VERY UNLIKELY
6. DON'T LISTEN TO THE RADIO
9. REFUSED/DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

196. HAVE YOU HEARD, SEEN, OR READ ANY ADVERTISING FOR RIDESHARING IN THE PAST 6 MONTHS ?

1. YES
2. NO
9. REFUSED/DON'T KNOW

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q196 IF Q<196> NE "1" THEN GO 200

197. WHERE DID YOU SEE OR HEAR THIS ADVERTISING ?

1. NEWSPAPER
2. RADIO
3. TELEVISION
4. AT WORK
5. IN THE MAIL
6. ON BILLBOARDS
7. BLUE FREEWAY SIGNS (EG. 1-800-286-RIDE)
8. RECEIVED A PHONE CALL
9. AT A BUS STOP / ON A BENCH
10. ON THE SIDE OF A BUS/VANS
11. OTHER
12. RIDESHARE WEEK
99. REFUSED/DON'T KNOW (OTHER LINE = 410)

(Multiple Response)

(DON'T READ PRE-CODED RESPONSES)

198. WHAT MESSAGE DO YOU RECALL FROM THIS ADVERTISING ?

1. NONE
2. THAT YOU SHOULD RIDESHARE [PROBE FOR WHY]
3. THAT NEW TRAINS ARE COMING
4. THAT YOU CAN CALL FOR CAR OR VANPOOL INFO
5. CALL 1-800-COMMUTE
6. IT SAVES MONEY
7. IT SAVES TIME
8. IT IS LESS STRESSFUL
9. TEAM RIDESHARE
10. EMPLOYER WOULD GIVE ME CERTAIN BENEFITS
11. IT WOULD HELP THE ENVIRONMENT
12. IT REDUCES TRAFFIC
13. IT SAVES WEAR AND TEAR ON THE CAR
14. OTHER
99. REFUSED/DON'T KNOW (OTHER LINE = 411)

(Multiple Response)

(DON'T READ PRE-CODED RESPONSES)

199. DID YOU TRY RIDESHARING AFTER SEEING OR HEARING THIS ADVERTISING ?

1. YES
2. NO
9. REFUSED/DON'T KNOW

(DON'T READ PRE-CODED RESPONSES)

200. HAVE YOU EVER HEARD OF THE 1-800-COMMUTE TELEPHONE NUMBER ?

1. YES
2. NO
9. REFUSED/DON'T KNOW

(PROMPT ONLY IF NO ANSWER)

SKIP BEFORE Q200 IF Q<198> EQ "5" THEN GO 201
SKIP AFTER Q200 IF Q<200> NE "1" THEN GO 204

201. HAVE YOU EVER CONTACTED 1-800-COMMUTE ?

1. YES
2. NO
9. REFUSED/DON'T KNOW

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q201 IF Q<201> NE "1" THEN GO 204

202. IN WHICH AREA OR AREAS WERE YOU MOST INTERESTED IN RECEIVING INFORMATION ?

1. TRANSIT INFORMATION
2. COMMUTER RAIL INFORMATION ON METROLINK
3. INFORMATION ON RIDESHARING AND PARK-&-RIDE LOTS
4. INFORMATION ON FREEWAYS AND STATE HIGHWAYS
5. INFORMATION ON BICYCLE COMMUTING
6. INFORMATION ON TELECOMMUTING AND TELECENTERS
7. GENERAL INFORMATION REGARDING THIS 1-800-COMMUTE SYSTEM AND ITS INTERNET ADDRESS

(Multiple Response)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

203. ON A SCALE FROM "1" TO "9," WITH "1" BEING THE LEAST SATISFACTORY AND "9" BEING THE MOST SATISFACTORY, HOW WOULD YOU RATE THE 1-800-COMMUTE SERVICE ?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
99. REFUSED / DON'T KNOW

(PROMPT ONLY IF NO ANSWER)

204. HAVE YOU RECEIVED A MATCHLIST OR RIDEGUIDE WHICH IS A FREE PERSONALIZED COMMUTE PLANNER CONTAINING ALL OF A COMMUTER'S TRANSPORTATION OPTIONS IN ONE HANDY GUIDE DURING THE PAST 12 MONTHS ?

1. YES
2. NO
9. DON'T KNOW/REFUSED

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q204 IF Q<204> NE "1" THEN GO 207

205. IN WHICH AREA OR AREAS OF THE RIDEGUIDE OR MATCHLIST WERE YOU MOST INTERESTED ?

- | | |
|------------|------------------|
| 1. CARPOOL | 4. RAIL |
| 2. VANPOOL | 5. PARK AND RIDE |

3. BUS

6. MAP OF HOV LANES

7. OTHER COMMUTE RELATED INFO

(OTHER LINE = 412)

(Multiple Response)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

206. ON A SCALE FROM "1" TO "9", WITH "1" BEING THE LEAST SATISFACTORY AND "9" BEING THE MOST SATISFACTORY, HOW WOULD YOU RATE YOUR SATISFACTION WITH THE RIDEGUIDE/MATCHLIST ?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9

99. REFUSED / DON'T KNOW

(PROMPT ONLY IF NO ANSWER)

207. OK, WE'RE ALMOST DONE. THESE LAST FEW QUESTIONS ARE FOR CLASSIFICATION PURPOSES ONLY TO MAKE SURE THAT THE SURVEY IS REPRESENTATIVE OF ALL RESIDENTS IN THE SOUTHERN CALIFORNIA AREA.

WHICH OF THE FOLLOWING BEST DESCRIBES THE KIND OF WORK YOU DO ?

1. SECRETARIAL/CLERICAL
2. PRODUCTION/CRAFTS
3. SENIOR MANAGEMENT
4. MIDDLE MANAGEMENT
5. MAINTENANCE
6. SALES/SERVICE
7. PROFESSIONAL
8. CONSTRUCTION
9. MILITARY
10. OTHER
99. REFUSED/DON'T KNOW

(OTHER LINE = 400)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

208. TO WHAT TYPE OF INDUSTRY DOES YOUR EMPLOYER BELONG ?

1. CONSTRUCTION
2. MANUFACTURING/PRODUCTION
3. TRANSPORTATION, COMMUNICATION, ELECTRIC, GAS & SANITARY SERVICES
4. WHOLESALE TRADE
5. RETAIL TRADE
6. FINANCE, BANKS, INSURANCE OR REAL ESTATE
7. SERVICE, ENTERTAINMENT
8. HEALTH CARE
9. PUBLIC ADMINISTRATION/GOVERNMENT
10. AEROSPACE
11. MILITARY
12. OTHER
99. REFUSED/DON'T KNOW

(OTHER LINE = 401)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

 209. APPROXIMATELY HOW MANY EMPLOYEES WORK AT YOUR WORK SITE ? ARE THERE:

1. LESS THAN 25
2. 25 TO 99
3. 100 - 249
4. 250 - 499
5. MORE THAN 500
9. REFUSED/DON'T KNOW (IF DON'T KNOW, ASK RESPONDENT TO ESTIMATE)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

 210. IN WHAT COUNTY DO YOU WORK ?

1. LOS ANGELES
2. ORANGE
3. RIVERSIDE
4. SAN BERNARDINO
5. VENTURA
6. IMPERIAL
7. KERN
8. SAN DIEGO
9. OTHER
99. REFUSED/DON'T KNOW (OTHER LINE = 402)

(PROMPT ONLY IF NO ANSWER)

 211. HOW LONG HAVE YOU BEEN WORKING AT YOUR CURRENT LOCATION ?

 212. MONTHS OR YEARS

1. MONTHS
2. YEARS

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

 213. SINCE YOU CHANGED YOUR WORK LOCATION IN THE LAST TWO YEARS,
 WHAT INFLUENCED YOU TO CHANGE YOUR WORK LOCATION ?

1. COMMUTE DISTANCE
2. COMMUTING COSTS
3. TRAFFIC CONGESTION
4. STRESS
5. OTHER
9. REFUSED/DON'T KNOW (OTHER LINE = 403)

(Multiple Response)

(DON'T READ PRE-CODED RESPONSES)

SKIP BEFORE Q213 IF Q<211> GT "24"
 AND Q<212> EQ "1" THEN GO 215
 SKIP BEFORE Q213 IF Q<211> GT "2"
 AND Q<212> EQ "2" THEN GO 215

 215. DO YOU ALWAYS, SOMETIMES, OR NEVER HAVE A VEHICLE AVAILABLE FOR GETTING
 TO WORK ?

1. ALWAYS AVAILABLE

2. SOMETIMES AVAILABLE
3. NEVER AVAILABLE
9. REFUSED/DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

 219. HOW LONG HAVE YOU LIVED AT YOUR CURRENT ADDRESS ?

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

 220. MONTHS OR YEARS

1. MONTHS
2. YEARS

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

 221. SINCE YOU CHANGED YOUR HOME LOCATION IN THE LAST TWO YEARS,
 WHAT INFLUENCED YOU TO CHANGE WHERE YOU LIVED ?

1. COMMUTE DISTANCE
2. COMMUTING COSTS
3. TRAFFIC CONGESTION
4. STRESS FROM COMMUTING
5. CHANGED JOBS
6. OTHER
9. REFUSED/DON'T KNOW (OTHER LINE = 406)

(Multiple Response)

(DON'T READ PRE-CODED RESPONSES)

SKIP BEFORE Q221 IF Q<219> GT "24"
 AND Q<220> EQ "1" THEN GO 222
 SKIP BEFORE Q221 IF Q<219> GT "2"
 AND Q<220> EQ "2" THEN GO 222

 222. ARE YOU . . . ?

1. UNDER 20 YEARS OLD
2. IN YOUR 20'S
3. 30'S
4. 40'S
5. 50'S
6. 60 OR OLDER
9. REFUSED/DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

 224. TO WHICH OF THE FOLLOWING ETHNIC GROUPS DO YOU BELONG ?

1. WHITE, NOT HISPANIC
2. AFRICAN AMERICAN (BLACK)
3. HISPANIC
4. ASIAN
5. AMERICAN INDIAN
6. OTHER
9. REFUSED/DON'T KNOW (OTHER LINE = 419)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

225. AND IS YOUR COMBINED TOTAL ANNUAL HOUSEHOLD INCOME . . . ?

1. LESS THAN \$20,000
2. \$20,000 TO \$34,999
3. \$35,000 TO \$49,999
4. \$50,000 TO \$64,999
5. \$65,000 TO \$79,999
6. \$80,000 TO \$99,999
7. \$100,000 OR MORE
9. REFUSED/DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

228. RECORD GENDER.

1. MALE
2. FEMALE

(DON'T READ PRE-CODED RESPONSES)

229. FOR VALIDATION PURPOSES ONLY, COULD I HAVE YOUR NAME ?

230. AND TO CONFIRM, YOUR PHONE NUMBER IS <<PHONE.NUMBER>> ?

1. YES
2. NO

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

SKIP AFTER Q230 IF Q<230> EQ "1" THEN GO END

231. REVISED PHONE NUMBER:

SKIP AFTER Q231 GO END

235. IN WHAT COUNTY DO YOU LIVE ?

1. LOS ANGELES
2. ORANGE
3. RIVERSIDE
4. SAN BERNARDINO
5. VENTURA
6. IMPERIAL
7. OTHER
8. REFUSED/DON'T KNOW (OTHER LINE = 421)

(PROMPT ONLY IF NO ANSWER)

SKIP AFTER Q235 IF Q<235> GE "7" THEN GO END

236. HOW MANY PEOPLE 18 OR OLDER WORKING 35 HOURS OR MORE PER WEEK,
LIVE IN YOUR HOUSEHOLD ?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6

7. 7
8. 8
9. 9
10. 10
11. 11
12. NONE
13. REFUSED/DON'T KNOW
14. OTHER (OTHER LINE = 422)

(DON'T READ PRE-CODED RESPONSES)

SKIP AFTER Q236 IF Q<236> EQ "12" THEN GO END

SKIP AFTER Q236 IF Q<236> EQ "13" THEN GO END

237. OF THE FULL-TIME WORKERS 18 OR OLDER, I NEED TO SPEAK WITH THE
PERSON WITH MOST RECENT BIRTHDAY. WOULD THAT BE YOU ?

1. YES
2. NO

(DON'T READ PRE-CODED RESPONSES)

SKIP AFTER Q237 IF Q<237> EQ "1" THEN GO 240

238. WHAT IS THIS PERSON'S NAME ?

239. WHAT IS A GOOD TIME TO CALL THEM BACK ?

*** SURVEYOR NOTE: TERMINATE AFTER THIS QUESTION ***

240. IN TOTAL, HOW MANY MOTOR VEHICLES, INCLUDING PASSENGER CARS, VANS,
MOTORCYCLES, AND PICK-UP OR PANEL TRUCKS OF ONE-TON CAPACITY OR LESS,
ARE OWNED OR LEASED BY HOUSEHOLD MEMBERS ?

***SURVEYOR NOTE: VEHICLES OWNED OR LEASED FOR ONE MONTH OR MORE
COMPANY VEHICLES, AND POLICE AND GOVERNMENT VEHICLES ARE
INCLUDED IF KEPT AT HOME AND USED FOR NON-BUSINESS PURPOSES.
DISMANTLED OR IMMOBILE VEHICLES ARE EXCLUDED. VEHICLES KEPT AT
HOME BUT USED ONLY FOR BUSINESS PURPOSES ALSO ARE EXCLUDED.***

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. NONE
10. REFUSED/DON'T KNOW
11. OTHER (OTHER LINE = 423)

(DON'T READ PRE-CODED RESPONSES)

241. IN TOTAL, HOW MANY PERSONS LIVE IN YOUR HOUSEHOLD ?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6

7. 7
8. 8
9. OTHER
10. REFUSED/DON'T KNOW (OTHER LINE = 426)

(DON'T READ PRE-CODED RESPONSES)

242. ARE YOU SELF-EMPLOYED OR DO YOU WORK WITH AN EMPLOYER ?

1. SELF-EMPLOYED
2. WORK WITH EMPLOYER

(DON'T READ PRE-CODED RESPONSES)

243. DO YOU WORK PRIMARILY AT HOME OR AT ANOTHER OUTSIDE LOCATION ?

SURVEYOR NOTE: PRIMARILY MEANS MORE THAN HALF

1. HOME
2. OUTSIDE LOCATION

(DON'T READ PRE-CODED RESPONSES)

244. DID YOU WORK AT HOME YOUR LAST WORK DAY ?

1. YES
2. NO

(DON'T READ PRE-CODED RESPONSES)

SKIP AFTER Q244 IF Q<243> EQ "1"
AND Q<244> EQ "2" THEN GO 246

SKIP AFTER Q244 IF Q<243> EQ "2"
AND Q<244> EQ "2" THEN GO 1

245. HOW MANY HOURS DID YOU WORK AT HOME THAT DAY ?

SKIP AFTER Q245 IF Q<243> EQ "2" THEN GO 1

246. WHICH OF THE FOLLOWING BEST DESCRIBES THE KIND OF WORK
YOU DO ?

1. SECRETARIAL/CLERICAL
2. PRODUCTION/CRAFTS
3. SENIOR MANAGEMENT
4. MIDDLE MANAGEMENT
5. MAINTENANCE
6. SALES/SERVICE
7. PROFESSIONAL
8. CONSTRUCTION
9. MILITARY
10. OTHER
99. REFUSED/DON'T KNOW (OTHER LINE = 427)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

247. WHAT TYPE OF INDUSTRY DOES YOUR COMPANY BELONG ?

1. CONSTRUCTION
2. MANUFACTURING/PRODUCTION

3. TRANSPORTATION, COMMUNICATION, ELECTRIC, GAS & SANITARY SERVICES
4. WHOLESALE TRADE
5. RETAIL TRADE
6. FINANCE, BANKS, INSURANCE OR REAL ESTATE
7. SERVICE, ENTERTAINMENT
8. HEALTH CARE
9. PUBLIC ADMINISTRATION/GOVERNMENT
10. AEROSPACE
11. MILITARY
12. OTHER
13. REFUSED/DON'T KNOW (OTHER LINE = 428)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

248. ARE YOU . . . ?

1. UNDER 20 YEARS OLD
2. IN YOUR 20'S
3. 30'S
4. 40'S
5. 50'S
6. 60 OR OLDER
7. REFUSED/DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

249. TO WHICH OF THE FOLLOWING ETHNIC GROUPS DO YOU BELONG ?

1. WHITE, NOT HISPANIC
2. AFRICAN AMERICAN OR BLACK
3. HISPANIC
4. ASIAN
5. OTHER
6. REFUSED/DON'T KNOW (OTHER LINE = 430)

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

250. AND IS YOUR COMBINED TOTAL ANNUAL HOUSEHOLD INCOME . . . ?

1. LESS THAN \$20,000
2. \$20,000 TO \$34,999
3. \$35,000 TO \$49,999
4. \$50,000 TO \$64,999
5. \$65,000 TO \$79,999
6. \$80,000 TO \$99,999
7. \$100,000 OR MORE
8. REFUSED/DON'T KNOW

(READ PRE-CODED RESPONSES-EXCEPT FOR 'DON'T KNOW', 'REFUSED', ETC)

251. RECORD GENDER:

1. MALE
2. FEMALE

(DON'T READ PRE-CODED RESPONSES)

SKIP AFTER Q251 GO 229

APPENDIX B:

Project Documentation of the 1999 State of the Commute Survey

OVERVIEW

Data for the 1999 State of the Commute study was obtained through 2,925 completed telephone interviews. A 1.8 percent sampling error is normally associated with sample sizes of 2,900. A 1.8 percent sampling error means that if this survey was conducted 100 times, one would be confident that 95 times out of 100 the characteristics of the sample would reflect the characteristics of the population within plus or minus 1.8 percent.

English and Spanish versions of the questionnaire were available to meet the language requirements of the respondents. A total of 525 interviews were completed in each county (with the exception of Imperial County) in order to make county comparisons possible. A 4.5 percent sampling error is normally associated with sample sizes of 500. This was the third time Imperial County was included within the State of the Commute study. Due to the size of Imperial County in terms of population, only 300 interviews were completed. The sampling error normally associated with sample sizes of 300 is 5.8 percent.

The target population of the State of the Commute Survey are commuters who live within the six-county SCAG region, are 18 years or older, and work outside the home 35 or more hours per week. Actual selection of eligible respondents was based on the person who had the most recent birthday. This process was used in order to avoid the possible bias of surveying a disproportionate number of women and children, since they are more likely to answer the telephone. Once interviewing had been completed, responses were weighted by the number of eligible respondents within the household. This ensures that small households are not over-represented in sample statistics. Furthermore, for the analysis at the regional level, data was additionally weighted by the commuter population in each county based on 1990 U.S. Census figures.

PROJECT INITIATION

SCAG contracted with Strategic Consulting & Research (SCR) of Irvine, California to conduct the data collection efforts. On October 12, 1998, a project initiation meeting was held to finalize the project objectives, review the survey instrument and finalize the project timeline.

The survey was finalized, translated into Spanish, and entered into the Computer-Assisted Telephone Interviewing (CATI) system on October 14, 1998.

SURVEY PRETEST

The pretest was conducted on October 22, 1998. Twenty surveys were completed and the data was reviewed to ensure that skip patterns were correct, and that questions were clearly understood by respondents.

SURVEYOR TRAINING

An extensive surveyor training program was conducted. Forty-three interviewers received a three-hour training program.

Telephone interviewers received project specific training that included the following:

- ◆ An overview of the project's background and objectives so that each surveyor is able to work more effectively with respondents to secure meaningful responses. This also helps surveyors identify any possible surveying issues so that they can be addressed before they become problems.
- ◆ The opportunity to conduct the questionnaire on-line with hypothetical respondents to familiarize themselves with the questionnaire and skip patterns.
- ◆ At least one test survey with a "live" respondent.
- ◆ A daily review with supervisory staff to discuss any interviewing issues that had been identified the previous day.

SURVEY SAMPLE

Survey respondents' telephone numbers were generated based on random digit dialing using a clean and updated sample generation procedure.

SCR used SSI-SNAP™ (Survey Sampling, Inc.) as its source for generating random digit dialing numbers. The sample was selected to achieve the designated sub-sample size for each of the counties by designating seven of the 10 digit telephone numbers. This means that the area code and any working prefixes in the sample set were identified. The first number in the exchange was generated to ensure that working blocks were used. The remaining three digits, which comprise the balance of the exchange, were then randomly generated.

WORKING BLOCKS

The working blocks of phone numbers were supplied to SSI by a company called BellCore which controls the use of all phone numbers, working blocks, prefixes, and area codes for the United States. SSI receives tapes from BellCore every six weeks to update working blocks. They also receive all new area codes two years in advance with a predetermined activation date. Together, this ensures that SSI includes all active working blocks in their database. Since BellCore is the source of phone numbers in the United States, and SSI receives them as they are released, this is the most up-to-date method possible for securing active working blocks of phone numbers.

SCREENING FOR DISCONNECTS, BUSINESS AND CAR PHONES

SSI has the ability to check the sample to eliminate car phone exchanges and to reduce the number of disconnected phone numbers that were received as part of the original sample. No active phone numbers were lost in this process. SSI also has the ability to screen for known businesses. The active business number file is updated every three months, and phone companies retain disconnected numbers for at least six months before reassigning them. Accordingly, the chances of losing an active residential number are less than one percent.

A total of 30,640 numbers were ordered to obtain the sample size of 2,925 commuting workers and 293 telecommuting workers.

DATA COLLECTION PHASE

Data collection began on October 23, 1998 and concluded on December 14, 1998. Data collection for both samples was conducted concurrently in order to gather a sample of telecommuting workers in proportion to their incidence within the population.

SURVEY EXECUTION

All surveys were conducted using SCR's in-house CATI calling center. Surveys were conducted Monday through Friday between 6:00 PM and 9:00 PM, on Saturday between 9:00 AM and 9:00 PM, and on Sunday between 9:00 AM and 9:00 PM. When a potential respondent was reached and could not complete the survey at that time, SCR scheduled a call back at the respondent's convenience or let the respondent call back at a time of their choice using SCR's toll-free number.

CALL-BACKS AND CALL DISPOSITIONS

Each number was called a minimum of five times until the quota for each county was met. Call times were varied to increase the likelihood of making contact. Five call attempts were made to each number to minimize the potential bias resulting from only capturing "easy-to-reach" respondents.

BILINGUAL SURVEYING

Surveys were conducted in either English or Spanish at the discretion of each respondent. A total of 261 surveys, or 8.9 percent of the total survey sample, was conducted in Spanish at the respondent's request.

QUALITY ASSURANCE

Quality assurance included on-going silent monitoring, review of completed surveys, random callbacks and two on-site visits by SCAG staff during the data collection process.

SILENT MONITORING

Every surveyor was silently monitored throughout the course of the project. During the initial stages of the project every surveyor was monitored after they had completed their training and results of the silent monitoring were discussed with the telephone surveyor. After project start-up, random silent monitoring was conducted during each shift.

REVIEW OF DAILY PERFORMANCE STATISTICS

On a daily basis, performance statistics for each surveyor were reviewed to ensure that data integrity was maintained. Results of the previous day's survey efforts were discussed at the beginning of each shift with the telephone interviewers.

VERIFICATION OF SURVEYS

Four hundred and sixty-six respondents, or 15.9 percent of the survey sample, were re-contacted by quality assurance staff to verify selected responses to selected questions. For the telecommuting portion of the study, 65 respondents, or 22.1 percent, were contacted.

DATA PREPARATION

All data collected was reviewed by quality assurance staff to ensure data integrity.

Based on the 1996 State of the Commute Study, a series of programs were used to review data integrity on an ongoing basis. Programs were used to:

- ◆ Identify missing data
- ◆ Identify excess data
- ◆ Verify the consistency of the skip patterns
- ◆ Check consistency of related responses
- ◆ Review other lines and pre-coded responses

DATA TRANSFER

Data was collected in the CATI system and transferred to an SPSS format. All data transfer was conducted in-house with project staff. A data consistency program, provided by SCAG, was run on all data to check frequencies. The data was transferred in four batches to allow SCAG staff the opportunity to begin data review and to develop programs for later use.

CALLING STATISTICS

Of the 30,640 telephone numbers ordered, 6,783 were screened for disconnects and car phones, leaving a calling sample of 23,857 telephone numbers. All 23,857 numbers were used for calling. An average number of 2.5 calls per number were made to

complete the 3,584 surveys. The average survey length was 15 minutes and 50 seconds. For the telecommuting it was 3 minutes and 58 seconds.

There were 6,425 ineligible phone numbers included in the screened sample. Ineligible numbers are outlined below:

Ineligible Numbers	
Disconnected numbers	3,530
Business numbers	1,728
FAX machines	1,167

There were 17,432 eligible numbers within the sample.

The sample included 5,287 numbers that were never reached during the survey time frame. The numbers never reached are outlined below:

Never Reached	
Perpetual answering machine/voice mail	1,589/80
Perpetual busy	348
Perpetual no answer	3,270

A total of 12,145 potential respondents were reached. The disposition of these calls is outlined below:

Numbers Reached	
Completed commuter surveys	3,291*
Completed telecommuter surveys	293
No qualified respondent in household	1,257
Refusals	4,726
Language barrier, non-English or Spanish	313
On-line for requested call back	1,620
Incomplete interviews	645

*2,925 surveys were within the designated counties, 366 were outside of the designated counties.

APPENDIX C:

A Guide to Transportation Agencies in Southern California.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG):

Over the past three decades, the Southern California Association of Governments has evolved as the largest of nearly 700 councils of government in the United States, functioning as the Metropolitan Planning Organization for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial. The region encompasses a population exceeding 15 million persons in an area of more than 38,000 square miles.

As the designated Metropolitan Planning Organization, the Association of Governments is mandated by the federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Additional mandates exist at the state level.

Executive Director: Mark Pisano

Contact: Media Relations (213) 236-1835

World Wide Web Address: <http://www.scag.ca.gov/>

SOUTHERN CALIFORNIA RIDESHARE

Southern California Rideshare, a service of SCAG, is the nation's first and largest commute assistance agency. Southern California Rideshare promotes alternatives to driving alone and serves a six-county area, including Los Angeles, Orange, Riverside, San Bernardino, Ventura and Imperial counties. It provides free service and information to employers and the general public in the following transportation areas:

- ◆ Ridesharing (carpooling, vanpooling, bicycling and walking)
- ◆ Public and private transit (bus and rail)
- ◆ Telecommuting (working at home)
- ◆ Alternative work hours and compressed work weeks

- ◆ Guaranteed ride home programs (offering ridesharers a free/subsidized ride home in case of emergency or unexpected overtime)

Director: Jim Sims

Contact: Media Relations (213) 236-1835

World Wide Web Address:

<http://www.socalcommute.org/>

CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS):

Caltrans is the state agency responsible for “the design, construction, maintenance, and operation of the California State Highway System, as well as that portion of the Interstate Highway System within the state's boundaries. Alone and in partnership with Amtrak, Caltrans is also involved in the support of intercity passenger rail service in California, and is a leader in promoting the use of alternative modes of transportation.” Los Angeles and Ventura Counties are located in Caltrans District 7. San Bernardino and Riverside counties are located in Caltrans District 8. Imperial and San Diego counties are located in Caltrans District 11. Orange County is located in Caltrans District 12. For information on statewide programs, call the Sacramento office. For information on local/regional programs, call the appropriate district office.

Director (Sacramento): Jose Medina

Contact: (916) 654-5266

World Wide Web Address: <http://www.dot.ca.gov/>

District 7 Director: Robert Sassaman

Contact: (213) 897-4867

World Wide Web Address:

<http://www.dot.ca.gov/dist07/>

District 8 Director: Stan Lisiewicz

Contact: (909) 383-4561

World Wide Web Address:

<http://www.dot.ca.gov/dist8/>

District 11 Director: Gary Gallegos

Contact: (619) 688-6699/6785

World Wide Web Address:

<http://www.dot.ca.gov/dist11/>

District 12 Director:

Ken Nelson (Acting District Director)

Contact: (949) 724-2000

World Wide Web Address:

<http://www.dot.ca.gov/dist12/>

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY (MTA):

SCRRA is a regional Joint Powers Agency (JPA) made up of Los Angeles County Metropolitan Transportation Authority, Orange County Transportation Authority, Riverside County Transportation Commission, San Bernardino Associated Governments, and Ventura County Transportation Commission. SCRRA plans, designs, constructs, and administers the operation of Metrolink, the regional passenger rail system serving the counties of Los Angeles, Orange, Riverside, San Bernardino, and Ventura.

Chief Executive Officer: Julian Burke

Contact: Media Relations (213) 922-2700

World Wide Web Address: <http://www.mta.net/>

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

The MDAQMD's boundaries encompass the High Desert region of San Bernardino County and the Palo Verde Valley of Riverside County. The MDAQMD is responsible for regulating stationary sources of air pollution within its 20,000 square mile jurisdiction. To this end, the District implements air quality programs required by state and federal mandates, enforces rules and regulations based on air pollution laws, and educates businesses and residents about their role in protecting air quality.

Air Pollution Control Officer: Charles L. Fryxell

Contact: (760) 245-1661

World Wide Web Address:

<http://www.mdaqmd.ca.gov>

ORANGE COUNTY TRANSPORTATION AUTHORITY (OCTA):

The OCTA is a multimodal transportation agency responsible for freeway, street and rail planning and development in Orange County. OCTA was formed in 1991 by the consolidation of seven separate transportation agencies, and is the primary transit provider in an urban county of more than 2.6 million people.

Chief Executive Officer: Lisa Mills

Contact: OCTA Administrative Office

(714) 560-OCTA

World Wide Web Address: <http://www.octa.net>

RIVERSIDE COUNTY TRANSPORTA- TION COMMISSION (RCTC):

RCTC acts as Riverside County's primary transportation agency and is responsible for planning and funding transportation improvements throughout the county. This includes oversight of the voter-approved Measure A program.

Executive Director: Eric Haley

Contact: Media Relations (909) 787-7141

World Wide Web Address: <http://www.rctc.org>

SAN BERNARDINO ASSOCIATED GOVERNMENTS (SANBAG):

SANBAG is a countywide coalition of elected officials that coordinates regional issues and is responsible for transportation planning, financing, and related programs in San Bernardino County. As a Council of Governments, SANBAG provides the only forum in which city and county representatives in San Bernardino County regularly discuss issues of mutual concern that extend beyond city boundaries.

Executive Director: Norman King

Contact: (909) 884-8276

World Wide Web Address:

<http://www.sanbag.ca.gov/>

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD):

The SCAQMD is the air pollution control agency for portions of the urban areas of Los Angeles, Orange, Riverside and San Bernardino counties. The agency is responsible for controlling emissions primarily from stationary sources of air pollution (e.g., oil refineries, power plants, and gas stations). The AQMD also has some authority over mobile sources (e.g., cars, buses, and trucks) and is responsible for the creation and enforcement of Rule 2202, On-Road Motor Vehicle Mitigation Options.

Executive Officer: Barry R. Wallerstein, D.Env.

Contact: Public Information Center
(800) CUT-SMOG

World Wide Web Address: <http://www.aqmd.gov/>

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY (SCRRA):

SCRRA is a regional Joint Powers Agency (JPA) made up of Los Angeles County Metropolitan Transportation Authority, Orange County Transportation Authority, Riverside County Transportation Commission, San Bernardino Associated Governments, and Ventura County Transportation Commission. SCRRA plans, designs, constructs, and administers the operation of Metrolink, the regional passenger rail system serving the counties of Los Angeles, Orange, Riverside, San Bernardino, and Ventura.

Executive Director: David Solow

Contact: Media Relations (213) 452-0233

World Wide Web Address:
<http://www.metrolinktrains.com>

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

The VCAPCD is the air pollution control agency for Ventura County, responsible for controlling emissions from new and existing sources in the county. The District develops, implements, and enforces an air quality management plan for Ventura County that complies with state and federal laws. In addition, the District develops regulations to reduce emissions from stationary and area sources, and permits stationary sources.

Air Pollution Control Officer: Richard H. Baldwin

Contact: Public Information Office (805) 645-1415

World Wide Web Address: <http://www.vcapcd.org>

VENTURA COUNTY TRANSPORTATION COMMISSION (VCTC):

VCTC develops and implements transportation policies, projects, funding and priorities for projects that involve highways, bus and minibus services, bicycling and bike paths, aviation, commuter and freight railroads and other transportation issues in Ventura County.

The Commission controls and reviews the use of federal, state and local funds for transportation and related projects, and also serves as the Airport Land Use Commission, Service Authority for Freeway Emergencies, Congestion Management Agency, and Consolidated Transportation Services Agency for Ventura County.

Executive Director: Ginger Gherardi

Contact: (805) 654-2888

World Wide Web Address:
<http://www.goventura.org/>